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### THE AUSTRO-HUNGARIAN MANŒUVRES.

By the "*TIMES*" MILITARY CORRESPONDENT.

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#### IV.

I HAVE already recalled the fact that the defeat of Benedek's army in 1866 was due, in great part, to the Austrian Staff. It is by no means to be inferred, however, that this Staff was peculiarly inefficient. It was certainly more capable than the Italian Staff of the same period, and probably more highly trained than the French Staff in 1870, or than the Russian in 1877. It had reached the normal standard of efficiency which at that time obtained everywhere in Europe, with one single exception. To the marvellous organisation created by Von Moltke it was immeasurably inferior. I doubt much whether the work of the great Prussian leader has yet received adequate recognition. It is scarcely too much to say that the change he brought about in the system of prosecuting war is as far-reaching as that brought about by Napoleon. In one respect, at least, Von Moltke has had no superior. It may be that his military genius was less brilliant than Napoleon's. His opportunities, at any rate, were fewer. But of him it may be said, more truly than of any other, that he organised success. Napoleon manufactured armies. Von Moltke made generals. Napoleon won splendid victories, but he could not teach others how to win them. The system of command which prevailed in his armies was notoriously feeble, and when those armies assumed such proportions that he himself could no longer maintain the direct control of each detachment, blundering and confusion at once ensued. The campaigns of 1812 and 1813, Moscow and Leipsic, were the result. I by no means wish to assert that had Von Moltke been removed in 1870 King William of Prussia would have found a successor of equal ability to command his enormous host. But I believe that in that host skilful leaders were more common than in the Grand Army. It needs not Napier to tell us that to conduct independent enterprises, to command semi-independent armies, to combine with others in prosecuting great strategic enterprises, or even to assume responsibility, Napoleon was unable to train his Marshals. With all his

ability he does not appear to have grasped, as Von Moltke did, the supreme importance of a sound system of command, of subordinate generals well versed in the higher branches of the military art, fearless of responsibility, and impressed with the necessity of intelligent co-operation and mutual support. In short, he was blind to the fact that a large army requires not only one great leader, but many; not one able strategist, but many; not one general who can plan and give orders, but many, who can act in accordance with the spirit of that plan even when no orders are forthcoming. Nor, before Von Moltke, was this recognised elsewhere. But Von Moltke's system, too, embraced more than the training of skilful leaders and well-trained assistants. Under his system both generals and staff officers became competent instructors in every detail of field service. On the regimental and battalion commanders devolved the instruction of the company officers, and on the latter the instruction of the men; but the generals and staff were the real source of all training for war; it was they who maintained the standard of efficiency, and it was through them that the tactical precepts of the supreme authorities were ingrafted on the normal practice of the whole army. By no other means than so thorough a system of instruction could the Prussian soldiers of '66 have overcome their almost total want of experience; by no other means could they have wrested victory so persistently from the French veterans of 1870.

Austria, the first to feel the stroke of the tremendous weapon forged by Prussia, was the first to profit by the lesson. Not only did the years which immediately followed Königrätz see the complete reorganisation of her army, on the Prussian model, but a thorough reformation in her system of training, and an even more subversive change in the constitution of the staff. It is needless to say that such transformation could nowhere become at once effective, even in the least conservative of armies.

Long years of labour were necessary before the spirit of the new ideas permeated the mass. Officers brought up under conditions of long standing could not be expected to take kindly to an unfamiliar system derived from a foreign source. Tact and patience alone could overcome the passive resistance which is reform's worst enemy, and it was hopeless to expect, until the old generation had altogether passed away, and its influence vanished, that the majority of soldiers would see the necessity of change which had but lately dawned on the ablest minds amongst them. The process was slow in Prussia; and it is not too much to say that she owes her extraordinary successes to that long period of peace which permitted Von Moltke to crown the labours of his predecessors. "The critics," writes a most able student of war, "have overlooked the fact that neither in 1866 nor in 1870 was his work completed. It takes time to carry through such a vast plan of reorganisation, and in 1866 it was only just beginning. The higher commands up to and including the divisions were filled by selected men, but below these grades it had not been possible to find a sufficient number of really trained men for the posts, for those who had grown up in the old school were too old to be taught new lessons." So, in Austria, as elsewhere, the years of

labour and patience are not yet at an end. Still, extraordinary progress has been made. The old traditions are nearly dead, and further advance will be made by leaps and bounds.

The staff, as the foundation of the new edifice, first claims attention. Its importance has gradually become recognised, and the theoretical knowledge which Napoleon, Wellington, and Von Moltke set themselves so diligently to acquire is not now regarded as mere waste of time. The part played by brains in war has at length been realised, and the very best practical soldiers in the army are now zealous to follow these great exemplars. Trained on the same lines as the German, administered for many years by the same able chief, Baron von Beck, and fostered by the late Minister of War, to whom the Empire owes so much, it has attained a high pitch of efficiency. The organisation of the army for war, the cheapest, and by no means the least practical, in Europe, is a standing monument to its administrative ability. The management of the manœuvres is scarcely less creditable; and the handling of the troops is a sufficient indication of its value in the field. I have already commented on the combination of the attacks. This was generally excellent, although neither the field-telegraph nor signalling were employed. Where a flank attack, or even a double flank attack was to be delivered simultaneously with one against the centre, the troops were always in position to begin the operation at the time prescribed. Where on one occasion the combination failed, it was because the enemy interfered with a double counter-stroke.

Nor were these combinations by any means easy. In the battle of September 19th the attack was made at two points. A division advanced against the left flank, and a division against the right. Between the two—the intervening space being filled by a brigade—was an interval of three-and-a-half miles as the crow flies, but both divisions struck the enemy almost at exactly the same moment. Moreover, before it came into action, the left division, moving north of the Eipel, and then crossing that river, had had to march over ten miles, and its original orders had been suddenly modified during the progress of the march. On September 21st, also, attacks were developed against both flanks and the centre; against the left and right at 9.50 a.m., and against the centre, the attacking division here having been purposely held back, at 10.20 a.m. Here, again, a wide interval divided the wings, while the right and centre divisions had to make long marches, of six to eight miles, to effect a partial change of front, and to cross a very broken and thickly wooded series of steep ridges. The marches of the various divisions to the rendezvous appeared generally well managed. It is true that I once saw troops waiting at cross-roads to take their place in the column, and waiting for some considerable time; but this was at the entrance to a very difficult defile, with a narrow bridge, and the delay may therefore be held excusable. But, as far as I could see, the troops were neither kept standing in the field, waiting for others to pass them, nor marched unnecessarily early from their bivouacs. The columns of the train were also effectively controlled. Nearly every single wagon was

requisitioned in the country and driven by civilians. But even when moving by mere cart-tracks they were always well closed up, and the gendarmerie had little trouble in enforcing attention to this most important particular. As such requisitioned transport will certainly play a most important part in any war in which Austria may be engaged, it is a sign of wise forethought that it should have become so amenable to discipline. Another proof of good staff work was the retirement of the 6th Corps after its repulse on September 20th. This operation had to be in part conducted over very broken ground, and a mile-and-a-half in the rear was a ridge of steep cliffs, pierced by only four roads. To withdraw forty battalions and fifteen batteries up these narrow defiles, in the face of a victorious enemy, was a most difficult problem, even had time been given for its solution. As it was, the arrangements had to be made in a few minutes. It was carried out, however, with the utmost promptness and regularity, and the pursuers, who were fortunately a little slow in pressing forward, never got a fair chance of interfering. As far as I could see, the orders issued by the army and divisional commanders were almost invariably written and carried by officers; and it may be remarked that the bearers of important messages neither spare horseflesh nor seek the easiest road. A gallop across country, in the direct line, seems to be the acme of an *aide-de-camp's* delight. I noticed, too, that the troopers used as orderlies, when arriving with a message, invariably halted in front of the group of staff officers, held up the hand, and then called out the name of the person to whom the message was addressed. This is a practical little detail, which might save important time. I have already referred to the promptness of the staff officers charged with supply; and I may add that troops were never kept waiting for their billets, and that the rapidity with which, when the "cease fire" sounded, the masses of troops engaged—eighty-four battalions, 42 $\frac{3}{4}$  squadrons, and thirty-five batteries, besides engineers, pioneers, and pontoon trains—were told off to their quarters, and marched off the ground, was most commendable. It must be remembered, too, that the troops had to be distributed not merely for purposes of shelter and water, but in accordance with the tactical situation.

As I have suggested, however, the very highest standard has not quite been reached. It is not improbable that even before 1866 there were staffs in Europe who, with the experience now given by the annual manœuvres of large masses, could have managed all the details to which I have referred just as well as the Austrian staff to-day. Marches, supply, orders, and quartering are more or less matters of mechanism, which any general with a good head for business and administrative capacity could readily put in motion. But one peculiar feature of Prussian excellence is the system of command, and I doubt whether this feature is as yet appreciated throughout the Austrian Army. This system, to put it shortly, consists in every superior officer confining himself to his own functions, and whilst still exercising supervision, leaving his subordinates to theirs. The function of the commander of an important unit—an army corps, a division, a brigade, a regiment, and even a battalion—is to direct and



not to lead. Where numbers have to be controlled, where troops are distributed in great depth, line behind line, it is impossible to exercise effective control from the front. Moreover, success, whether in the infantry or the cavalry fight, depends upon the effective use of reserves. With or near his reserves—and a reserve must be retained throughout—is the proper post of a commander. Thence he can send orders to the lines in front of him; he cannot, if his reserves are to be promptly used, assume direct control of the line in actual contact with the enemy. Nor, when once within the zone of heavy fire, can orders or signals be relied on. In every determined engagement, when once that zone has been reached, the handling of the first line, whether of attack or defence, must be left to its own immediate leaders. On their judgment and initiative, and on their appreciation of the spirit of the orders which have already been communicated to them, the success of the first line must depend. Such is the Prussian system of command, throwing responsibility on all officers, no matter what their rank, and imposing self-restraint upon every leader who has subordinates under him. In the years which succeeded 1866 such doctrine was a hard saying. It was but grudgingly accepted. To leave each man to his own functions was interpreted by the older officers as abdicating their own. To trust subordinates to act on their own initiative, and to consider the spirit of an order rather than the letter, was held to mean the substitution of many generals for one. It was not understood that even junior officers could so be trained as to use their wits intelligently, and to forbear dashing off, in defiance of all sound principles, on wild independent enterprises.

Direction, not leading, being what is required from commanders, it follows that the first indication of the existence of such a system is that the generals and staff should be the least conspicuous items of the army, that they should occupy positions from which supervision can be most effectively exercised over the whole of their command, and not merely the part already engaged, and that there should be no undue interference with the functions of subordinates. And if this is true of war, it is even more true of manœuvres. Manœuvres are for instruction. It is there that officers—of every rank—should be trained to use their own judgment. It is there that they should be permitted to find out the difference between intelligent initiative and the reverse. It is there that mistakes and errors of judgment are actually valuable, for they become, if pointed out, object lessons of wide influence. In fact, manœuvres where no mistakes at all are committed, if such there be, are probably less useful than those prolific in blunders. As far as regards the leading of the Austrian armies and the divisions everything worked as it does in Germany itself. As promotion to the higher commands is purely by selection, it is probable that the corps and divisional commanders are thoroughly competent. Selection, however, is also applied to the brigades, and here I noticed a marked difference. Some of the brigadiers were certainly not invariably inconspicuous, and on several occasions I not only saw them standing within a few hundred yards of the enemy's firing line, but placing even companies in position. At one

time a small column of assault was formed up close behind the firing line, which was heavily engaged, under the personal direction of the brigadier, and to more than one of the captains he gave specific instructions. In thus assuming direct control, he interfered with the functions of both the battalion and regimental commanders, and without, as far as I could see, the slightest reason. The objective to be assaulted, a trench on a knoll, was perfectly clear; there could be no doubt as to what was wanted, and an order sent by an *aide-de-camp* would have done just as well, if not better. This usurpation of the most important duties which regimental officers will have to perform in battle is most certainly not the way to train them. Shortly before this incident I observed a brigadier, on the flank of his brigade, which was already engaged, watching a counter-stroke made nearly a mile away, and this at a moment when the enemy before his centre was weak, and it might have become necessary, for the safety of the whole army, to make at any moment a sudden assault upon his line.

I cannot say that the grand art of "sitting still" seems to have been so thoroughly mastered as in Germany. I may remark, on the other hand, that even among the generals who attempted to do everything themselves, there was no excitement. They certainly galloped from one part of the line to the other, and tried to see everything instead of sending staff officers to report, but their orders were given very quietly. At one time the moment was critical. A portion of the line, then actually being attacked, was, if certain contingencies arose, to be reinforced by a company. The captain did not quite understand, and said so. The general explained most carefully. The captain asked one more question, and went off, thoroughly realising his instructions. So here, where there was every excuse for hurry, orders were given deliberately and quietly, and the superior betrayed no wrath at not being at once understood. This method of imparting orders seems the usual practice right through the army. There is no shouting, no stentorian tones, and a very evident grasp of the facts that time is not wasted by precise explanations, and that nothing is to be gained by fuss and flurry. There is one excuse to be made for the brigadiers, and this is the size of their brigades and the smallness of their staff. Seven battalions is far too large a force to be controlled by a general, a staff officer, and a galloper.

It is not to be thought, however, that such shortcomings as I have above enumerated pass without comment in the Austrian Army. Nor is there the slightest disposition to check initiative. On the contrary, the Emperor—and there is no sounder critic of tactical leading than he—gave high praise on several occasions to officers who had acted boldly on their own judgment, and such assumption of responsibility was by no means infrequent. The cavalry officers of every grade were particularly conspicuous, and the divisional leaders, on at least two occasions, modified their orders, or rather followed the spirit of their orders, in contradistinction to the letter, with marked success. At the battle of September 20th one of the 4th Corps generals, posted on the right wing of the defence, suddenly launched his whole division, without waiting for

orders, in a rapid counter-stroke against the flank of the attack, for the moment weakly guarded. The effect was decisive of the battle. It may be added that the reserve brigade of the attacking army, when the flank was thus unexpectedly rolled up, was so skilfully manœuvred and so promptly deployed on a strong position that the withdrawal of the retiring troops was effectually secured. With the progress that has already been made, and the encouragement given by the supreme authorities, it is but fair to assume that it will not be long before Von Moltke's system of command will be as firmly established in Austria as it is in Germany.

But as yet, putting the cavalry aside, the new ideas have not completely permeated the lower ranks. The infantry is excellently disciplined and thoroughly well-drilled. Deployment for the attack is quick and precise. Formations are readily taken up, and the battalions fit into their places without the slightest confusion or delay. The advance, in long successive lines, is steady, regular, and unchecked. All ranks are evidently soundly trained, and the men at all moments are well in hand. With all this, however, there is something wanting. *En masse* the troops are excellent; but when individual action is required, when there is no time to be sending back for orders, when sudden opportunities offer, and when the ground demands the intelligent action of small bodies, the work is not so good. It would be impossible, within the limits of these letters, to describe the many incidents which convinced me that the training of the officers of the Austrian infantry is not as yet quite up to the German standard. It is only fair to say, however, that, as regards the formations adopted under fire, I hardly ever saw a mistake committed. Once only a company or two of infantry sent to prolong the flank of a firing line marched slowly in file from left to right, and then by a front turn reached their position. They were certainly partially covered during this movement, but a line of hostile rifles was not more than 500 yards distant. On every other occasion, although the troops were a little slow in availing themselves of cover, and often disregarded it altogether, formations were thoroughly well adapted to the situation.

One noticeable point was the very great care taken by the infantry, whether brigades, battalions, or companies, to secure their flanks and to provide for themselves the means of getting information of what was going on in front. The escorts to the artillery had always patrols and sentries well pushed out; and troops of the second and third lines of defence were careful to keep in touch with those in front. For instance, near the close of a battle I came on two companies of Landwehr to the extreme right rear of the defence, in temporary occupation of a village. The enemy had long since retired, and the pursuit was nearly over. Even the cannon-fire had ceased. Many of the men in the village had fallen out to get water, and the rest were lying in the shade of a leafy lane. But on passing to the front I found patrols at work, keeping in touch with the troops to the left and observing the ground over which the enemy had been driven. Vanguard, I may notice, were linked to their advanced guards by a string of files, about 200 yards apart. Battle-patrols, too,

were in constant requisition, and all the above measures were adopted even when it was obvious that both front and flank were covered by the cavalry. I think it will be admitted, taking all the points I have referred to into consideration, that very great care is expended on the instruction of the Austro-Hungarian infantry. I am convinced that the importance of individual initiative is not in the least underrated, but that every effort is made to rectify the deficiency. It is significant to note that in almost every course of instruction to which officers are liable, "the theory of training officers" forms one of the subjects. The fact that the regimental officers, to some extent, are still behind the times may probably be explained by the fact that their immediate instructors are not yet abreast of them. In vain will the regulations point out the necessity of training young officers to responsibility, and useless will be the endeavours of the generals to enforce these regulations, if those who directly control their daily work either do not understand the regulations or do not trouble to observe them. Many of my readers will have perused with interest the letter on "Nelson's Children" which appeared in the *Times* of October 20th. In this tribute to the efficiency of our naval officers the opinion of a distinguished American sailor is quoted to show the foundation on which this efficiency rests. "English middies," he says, "are caught young; and the first thing they learn is how to command men and to assume responsibility." There is nothing, unfortunately, analogous to "boat-duty" in the peace service of an army. The more reason, therefore, that those charged with the training of officers should make use of the opportunities afforded by field exercises and manœuvres to teach their subordinates "how to command men and assume responsibility." This is not the least important of their duties.

The fire-discipline of the infantry, as far as complete subordination to word of command is concerned, is excellent. Practically, it is indifferent. Sometimes no ranges were given. Elsewhere the men brought the rifle to the shoulder and loosed the trigger without aiming. The control was admirable. Changes were made from volleys to individual, or from volleys to magazine-fire, and back again, without the slightest difficulty. But the character of the control exercised was not so good. The word "fire" in the volleys followed the word "present" so quickly, even at extreme ranges, that no proper aim was possible. It was almost snap-shooting at long distances. Nor was much care taken as to position. I saw some sections standing, others kneeling, and others lying down on the same ground, and that ground identical throughout. Volleys fired by a company standing, in two ranks, against a thin line of infantry more than a mile distant did not strike me as useful practice. The non-commissioned officers were certainly much to blame. They almost invariably stood or knelt too close to their groups to watch them properly. In some instances they supervised them from the flank, actually kneeling in the line. Nor did the subalterns look closely after the non-commissioned officers. In fact, fire, except as regards firing good volleys, which were certainly the rule, and changing rapidly from one kind to another, seemed a most perfunctory performance; and, although only blank cartridge

was being used, it was very evident that the habit of attention to every detail, which will alone produce really effective results, is not yet engrained in the Austro-Hungarian infantry. The inexperience of the group and section leaders has doubtless much to do with this. But it must be remembered that even the sergeants are generally without experience, for not more than 40 per cent. re-engage after their three years. Every foreign army, however, that I have seen labours under the same difficulty; and it would certainly seem wiser, instead of increasing their numerical strength—already so large as to be unmanageable—to give them a stout backbone in the shape of non-commissioned officers who know their duty thoroughly and can exercise command. In the battles of the present era, with all their incentives to panic, straggling, and indiscipline, and with their long fire-fights, in which troops under thorough control will have an enormous advantage, the non-commissioned officer is even a more important factor than hitherto.

One most praiseworthy feature, both in the infantry and the other arms, was the extreme quiet with which everything was done. Nothing was more striking than the absence of all shouting and the absolute silence which accompanied the movement of large bodies. Commands, when the troops were in motion or about to be set in motion, were nearly invariably by signal of sword or arm, and all excitement or hurry was thus completely checked. The system seems universally understood, and would be of practical benefit in war.

The attack, as practised by the infantry, is a simple matter. The advance is made in as many successive lines, and on such front, as the General may order. At extreme ranges the advance is covered by sections, in single rank, elbow to elbow. When approaching the zone of aimed fire the sections are reinforced on either flank, and a strong firing-line is thus established from the very outset of the fire-fight. Behind this line follow the second, third, and in some cases even more lines, all of them, as a rule, as far as I observed, in two ranks. Fire generally commences at from 900 to 700 yards distant from the enemy, and, directly the firing-line is checked, strong detachments from the second line advance to reinforce. The attack progresses by a series of advances in one general line, until at from 600 to 400 yards distant from the enemy a covered position, if possible, is occupied; further reinforcements are brought up, and the very heaviest fire is poured in. At this point comes the struggle for fire-supremacy, and it is permitted to continue sometimes for half-an-hour. The assault is delivered by a body of fresh troops, formed in successive lines, who advance to the charge with bayonets fixed and bugles sounding. This, at least, was the normal procedure on the open ground over which a great part of the operations took place. In broken ground, under cover of scouts, a strong firing-line was formed out of sight of the enemy, and, advancing to the nearest favourable position, struck him suddenly with a broad front of heavy fire. There was no doubling in the attack, not the slightest hurry, no rushes, and a great deal of deliberation. In fact, compared with either the Germans or the French, the movement was slow. It is possible, however, that this is

enjoined by regulation, for a man laden with a heavy pack who has been hurried to the firing point is not always in the best trim for accurate shooting. This is a question which is naturally connected with the amount of physical training to which the troops have been subjected, but there can be no doubt whatever that the Hungarian battalions, and also, as I am informed on the best authority, the Austrian, have reached, at the time of the autumn manœuvres, that perfection of condition which is best described by the phrase "as hard as nails." Nowhere have I seen better marching, more empty ambulances, or fewer footsore men.

Without exception, every foreign officer present had nothing but praise for the discipline, the endurance, and the cheerfulness displayed by these tough little soldiers. I have already referred to the long distances traversed in great heat and in stifling dust, and the forced marches there mentioned were not followed by days of rest. One division marched twenty-five miles one day and twenty miles the next, and were engaged on both. When the manœuvres ceased at 11 a.m. on September 21st, it had thirty miles to cover before it reached its entraining station the next afternoon. Nor, after such exertions as these were the men in any way played out. In marching through the villages to their bivouacs, the columns, white with dust, were as well closed up as when they marched out in the early morning, and the patrols of the outposts were active throughout the night. It is quite true that whenever they got a chance of doing so during the day, even when the battle was raging, they took it out in sleep; but although the pack they carry is easily slipped off and on, it was rare, indeed, to see a man relieve his shoulders of their weight. This fine physical condition is not the result of any peculiar sturdiness in the race. The men, although as a rule well built and sturdy, are in no way remarkable for bone or muscle. The whole secret lies in systematic and careful training. The men begin in the spring with light loads and short marches, and both weight and distance are gradually increased until the heavy work of the manœuvres is merely regarded as part of the ordinary routine. All parades, too, are in heavy marching order. It should be remembered, too, that the imperial manœuvres are but the climax of the summer's work. They have been led up to by the regular series of regimental, brigade, and divisional manœuvres, and I am not far out in saying that nearly every man present at the operations round Balassa had already been engaged in much the same sort of thing, on a smaller scale, and with probably rather less discomfort, for nearly six weeks. I am informed, indeed, that many of the battalions had already marched 200 miles. By that time the weak and sickly had been weeded out, and it was a case of the survival of the fittest; but I am assured that so sound is the system of training that very few men indeed break down, and, further, that the reservists who are called up for the manœuvres are very seldom found to have lost their marching powers. An infantry fully prepared to encounter the severest trials of a campaign at a moment's notice would be worth, at the outset, nearly twice its strength of men in bad condition. The inferior mobility of the latter would place them at an enormous disadvantage. I may say that I was so surprised at some of



these performances that I had my doubts as to the real weight of the packs. However, on visiting a bivouac, all suspicions at once disappeared. The packs, even with the cooking pots removed, weighed very nearly thirty pounds. I may add that there is not the slightest question as to the actual distances accomplished. The Director of the manœuvres issues every morning, before operations begin, maps which show the exact dispositions of the opposing forces during the previous night, and the length of all the marches can thus be checked. (These maps, I may add, are of course confidential, and issued only to the Emperor, the umpires, and privileged persons.)

The men wear no gaiters, and, instead of socks, bands of greased linen. Their boots, a very little higher in the ankle than our own ammunition foot-gear, are sensibly made, with broad soles and low heels, and laced in front. Their dress, also, is practical. The blue blouse is, perhaps, a little too short, but it is of good material and comfortable cut, and has no less than four outside pockets. The cloth cap of light blue, with black leather peak, seems a most suitable head-dress for the country.

As to the out-posts, I noticed nothing new. Groups were invariably used, and patrolling was incessant, the cavalry patrols well to the front, and the infantry providing for the immediate security of the pickets. So important is this duty considered, that the distance to which cavalry should patrol is laid down as eight miles, unless they meet the enemy, and infantry, if there are no cavalry, four-and-a-half miles. It did not seem to be considered necessary, in country open to the front, where there is no chance of a surprise, that day sentries should be within sight of each other all along the line, and warning was conveyed from one point to another by means of patrols.

One last point about the infantry deserves particular notice. They had the satisfaction of firing away an abundance of blank cartridge. And not only does a plentiful supply of ammunition add very largely both to the realism and interest of a field day, but it makes the whole series of operations one long-continued practice in fire-discipline. How many cartridges the Hungarian infantry carried to begin with I could not exactly ascertain. I only know that the men of one regiment, who had already been heavily engaged on two successive days, had fifty rounds apiece left for the concluding battle. The artillery, I believe, was not quite so lavishly supplied. But from beginning to end I never observed the slightest slackening of fire because ammunition had given out. It is only in this direction, however, that the path of rigid economy was departed from. In every other respect expense had been most carefully considered. Not only was nearly all the transport requisitioned, but the ammunition columns, infantry ammunition carts, field telegraphs, balloons, and field railways had all been left at home. A few cyclists, used as orderlies, were the only accessory of the slightest novelty, except, perhaps, "the dogs of war." I am afraid it would scarcely be useful to repeat the stories told by the soldiers of the marvellous qualities of "Hector," "Hans," and other mongrels. That they wind a Russian at several



miles distance is one of their least remarkable attributes, but the men at least seem to have the greatest confidence in their instincts, and Hector and Hans profit by receiving large additions to their regulation rations.

### V.

The Hungarian hussar has good reason to feel proud of himself. It is little wonder that he looks down with unutterable contempt upon his infantry comrade. Not only is he a most picturesque little soldier in his blue and scarlet, with his well-cut clothing, his braided tunic, and his dolman fringed with astrakhan; not only is he exceedingly well mounted and exceedingly well led, but he embodies the most cherished traditions of a nation of horsemen, and the regiments with which he serves have a reputation second to none in Europe. Side by side with his Austrian *confrères*, he won undying fame in the self-sacrificing charges which secured the retreat of the broken infantry at Königgrätz. Side by side with the Polish lancers he took part in the extraordinary achievements of Custoza, where fifteen squadrons held in check thirty-six battalions of infantry throughout the day, charged down their retreating columns and summoned their Generals to surrender, and three troops of Uhlans, numbering just 100 sabres, rode through one brigade of infantry and dispersed another. That the Austro-Hungarian cavalry of to-day, in all save daring and horsemanship, is even superior to the cavalry of '66 has long been known, and I think that a description of the work done by the 6th and 18th Brigades at the manœuvres will make it clear that, to say the least, it has very little to learn from others. The brigade was composed of two regiments, each of six squadrons. Nine squadrons of divisional cavalry were present with each army, and two batteries of horse artillery were attached to each brigade. The whole were hussars—*i.e.*, light cavalry—and it may be noted here that all the Imperial horsemen are of this description, Austria supplying the dragoons, Hungary the hussars, and the Polish provinces the lancers. Of the 18th Brigade, one was a Honved (Hungarian Landwehr) Regiment, and three squadrons of the divisional cavalry of the 6th Army Corps were also composed of these troops of "the second line." It may be added that an infantry battalion was attached to each brigade, and this notwithstanding the fact that the hussars are armed with a magazine carbine, and were accompanied by a strong detachment of horse artillery. The first day of the manœuvres, when the two armies were still 50 or 60 miles apart, was entirely given up to the cavalry reconnaissance, and this work merits description. To avoid further reference to the Hungarian map, I will apply the dispositions of the troops to a district more familiar to my readers. Assuming that a Southern army crossed the Thames at Staines on the 17th, and that on the same date a Northern army moved south for Reading, that the former had a division at Wallingford, the latter a division at Bury St. Edmunds, the reconnaissance was carried out as follows:—The 18th Brigade (Southern) was ordered to advance to St. Albans and to reconnoitre as far as the line St. Ives, Cambridge, Saffron Walden, Chelmsford, whilst the infantry division at Wallingford reconnoitred as

far as Newport Pagnel and Bedford. The district to be scoured was about fifty miles in width, and was thus dealt with. The 18th Brigade despatched three troops and a telegraph patrol to Bishop's Stortford; two troops and a telegraph patrol in the direction of Royston; one troop, *via* Dunstable, in the direction of Biggleswade, while the division at Wallingford sent two patrols to Newport Pagnel and Bedford. The Northern army, on the other hand, moved the 6th Brigade to Buntingford, with orders to reconnoitre the line of the Thames from London to Reading. Two troops, with a telegraph patrol, moved on Wallingford and Reading; one squadron on Staines; two troops on London. The telegraph patrols consisted, I believe, of four trained telegraphists and their plant.

As far as I was able to gather, the following information was obtained. The right contact detachment (two troops) of the Northern army met the cavalry of the Wallingford division within twelve miles of that place. The detachment was driven in, but ascertained the presence of the Southern division and the direction of its march. The centre squadron met the centre detachment (two troops) of the Southern army at Luton, drove it back, and discovered that the main body of the army's cavalry was at St. Albans. The left detachment (two troops) seems to have reached Hatfield without opposition, and from that point patrols were sent forward, one of which observed the Southern army crossing the Thames at Staines. Further, the telegraph patrol of the centre division managed to tap the line, and to intercept communications between the 18th Cavalry Brigade and the Southern army. The exact composition of the 18th Brigade was thus discovered, as well as the strength of the force by which it was directly protected.

The Southern commander was not quite so well served. His centre contact detachment had been driven in, but one of its patrols managed to elude pursuit, and, again moving northward, ascertained in what direction the main body of the Northern cavalry were moving; whilst the right detachment (three squadrons) appears to have learned that the third division of the enemy's army was a day's march in rear of the remainder. It is understood, of course, that such rapid and far-reaching reconnaissance would be impossible in the close and intersected country which intervenes between Cambridge and the Thames. The bare downs of Northern Hungary, with their commanding ridges and scanty woodland, afford such facilities for observation and movement as to make them a perfect manœuvre ground for cavalry. The squadrons are not confined, as they would be in England, to the hard high roads, but have the best of "going." At the same time, both the area and the distances covered are worth noting. Some of the patrols, by the time they got back to bivouac, must have traversed between seventy and eighty miles, and from fifty to sixty miles appears to have been the average; one squadron, indeed, covered 150 miles in thirty-six hours. While the contact squadrons were busy to the front, it is not to be supposed that the main bodies of the brigades were idle. The reconnoitring detachments, at all events in the centre, were well supported, and there was plenty of work for every one.

For my own part, I went early in the day towards the *débouché* of the Eipel defile, by the great high road, and was fortunate enough to see a lot of interesting work. The Southern Brigade (18th) had reached a point about six miles south of the *débouché*, where the *chaussée*, approaching from the south-west, turns to the north and runs parallel to the wooded hills. On the hills, which are accessible only by a few narrow and steep defiles, were the enemy's patrols, and on both sides there was much activity. The Northern patrols at last succeeded in drawing the fire of the Southern horse artillery, and this must have told them that they were in presence of the main body of the Southern Brigade. The points that struck me were, first, the resolution which the patrols displayed in attempting every single point of passage; and, second, the manner in which they kept themselves concealed. Nor were the operations unlike the reality. There were no wild charges of small bodies, no chasing of single scouts; but the whole of the troops appeared to be intent on dodging and deceiving their enemy and on getting through his line by a clever use of ground and rapid movement.

The next morning the two brigades met in conflict. During the night they both had succeeded in ascertaining, by means of their patrols, the position of the other, and the Southern commander, therefore, pushing boldly forward, entered into the long defile at dawn, and came out on the open valley, three miles broad, which lies beyond Balassa-Gyarmat. It is probable, however, that his advance would have been less bold had it not been for the rifle battalion attached to his brigade. The previous evening he had sent a company to seize Balassa, and three others to occupy a defile through the hills upon his right. As the enemy made no attempt to defend the passes, his passage of the ridge was thus made easy.

Once the valley was reached, the two forces were not long in coming into collision. The Southern Brigade moved forward towards the centre of the valley, with its two batteries, the rifles still holding the defiles in rear of either flank. The patrols at once came into contact, and the Northern Brigade debouched into the valley from the other side. The two were now about three miles apart, each with a strong line of patrols well to the front. From the point where the Northern Brigade debouched into the open the ground ascends very gradually for about two miles, then dips a little, and then rises again. Thus the commander saw in front of him at this moment a wide stretch of absolutely open *terrain*, rising to a long ridge and freshly ploughed. On the crest of the ridge rode his patrols, and beyond the crest a dense cloud of dust betrayed the presence of his enemy. Moving out into the valley, he immediately formed for attack. Five squadrons deployed as first line; in advance, to the left, two squadrons formed an offensive flank; two squadrons to the right rear were in reserve, and further to the right were the two batteries and their escort. The whole, after forming, moved forward at a trot towards the crest of the ridge. Meanwhile, the patrols, moving along the crest, conformed to the enemy's movements, and thus indicated the direction from which he was to be expected. The cloud of dust, which had been

moving towards the left, seemed to be retiring, when, suddenly, the patrols came racing back from the ridge, and the enemy's batteries, coming rapidly into action, opened fire against the left flank of the Northern Brigade. The two squadrons, which formed the advanced *échelon* of the Northerners, trotted towards some slight cover a little to the left of their line of advance, whilst the guns replied to the enemy's challenge. A very few moments later the great dust-cloud behind the ridge again approached, and the long lines of the Southern cavalry, rising suddenly above the crest, swept forward at the gallop down the gentle slope. When they came in sight the first line of the Northerners was nearly 1,200 yards distant, moving rather obliquely to the line of their advance. The slight change of front, however, was very quickly made; the line, already at the trot, broke at once into the gallop; and the two brigades, riding with swords drawn and loud cheers, met in the midst of a perfect whirlwind of dust. So solid was the yellow cloud that for a few moments not a single one of these 2,000 horsemen could be seen. An indistinct impression of several Southern squadrons wheeling up against the enemy's right, of the first lines pulling up when almost actually in contact, and of the offensive flank of the Northerners, notwithstanding the rapidity with which it was manœuvred, being a little too late, was all that remained of the charge. It was three or four minutes before the air cleared, but already the squadrons had rallied, and both side were falling to the rear.

The Southern Brigade, it appears, had advanced with a regiment of six squadrons in first line, and with two-and-a-half in second line on the left, and with two in reserve upon the right. The umpires gave the victory to this brigade, and it was reported afterwards that they had done so because the first line was stronger than that of the 6th Brigade. As I have said, however, it struck me that the offensive flank of the latter was a little late in striking in and had had to ride straight across the front of the hostile batteries at a range of little more than 800 yards. On the other hand, the reserve of the 18th Brigade seemed to be better in hand, and to have struck in at a more opportune moment. However, the dust was so thick and the pace so rapid that it was difficult in the extreme to see exactly what happened, and I can only give my impressions.

As I have related above, the two squadrons which formed the Northern offensive flank had diverged a little to the left in order to gain cover from the guns. It struck me at the moment that they were already rather too far to the front, and that a slight change of direction on the part of the main body would throw them out of the hunt. This seems to have been exactly what happened. The enemy was so well covered by the ridge and came on so suddenly, that there was no time to make up lost ground before the two first lines met in the *milie*. The offensive flank was too late, and was struck in flank by the Southern reserve.

The horse artillery, to all appearance, would have played an important part in this action. As far as I could judge, the batteries of either side, when the charge took place, were within 1,000 yards of the enemy's flank. But the Southern batteries came into action first, when

the enemy was moving only at a trot, and when there was comparatively little dust to obscure their view. I may add, also, that my impression is that the Southern commander manœuvred cleverly behind the ridge. Judging from the direction of the cloud of dust, he moved rapidly towards the enemy's left, sent his guns into action, and then, changing direction to the left, deployed as he advanced, and came down in full force on the enemy's centre and right. This manœuvre, possibly, helped to throw out the Northerners' offensive flank.

This attack took place at 7.15 a.m. The Northern force at once fell back to the defile by which it had debouched, followed, after some interval, by six of the hostile squadrons.

The former was now well covered. At the foot of the hills the high road crosses a brook which runs between high banks, and the ground immediately beyond is wooded and broken. To defend the bridge over the brook two squadrons were dismounted, and took post in a copse which gave them excellent cover. At the same time a section of Northern infantry arrived upon the scene, the remainder of the battalion having been already ordered to block a defile further to the south. The artillery, too, came into action behind the dismounted hussars, and under these circumstances the Southern Brigade had to give up all idea of pushing the pursuit, and, after some heavy artillery fire, retired towards Balassa. When this movement was reported, the commander of the Northern Brigade immediately determined to advance once more and endeavour to turn the tables on his enemy. The latter appears to have been induced to withdraw by the approach of the hostile infantry. The commander of the three Northern companies which had originally been assigned to the defiles to the south, on hearing the heavy firing on the high road, had immediately marched towards the sound of the cannon. It was his approach apparently that encouraged the Northern commander to once more try conclusions. His ten squadrons, with the two batteries, rapidly passed the defile, covered by two squadrons as advanced guard. The Southern brigadier, finding himself followed, countermarched his two regiments and again advanced. Unfortunately, whilst withdrawing, his two regiments, each retiring independently, had moved too far apart. The consequence was that when the brigade formed for attack one regiment was a long way to the left rear of the other, and the enemy, who had already deployed, was coming on so fast that there was no time to contract the interval. The brigades met in the following formation. The Southern had five squadrons in first line and four-and-a-half to the left rear, whilst the Northern had five squadrons in first line—three of one regiment and two of another—two in second line to the left, and two in reserve upon the right. The batteries on both sides came into action on the outer flanks. So rapid was the manœuvring that the first line of the Southern Brigade was not completely formed when the shock took place. It was thrown back, but the four-and-a-half squadrons in second line attacked and defeated the Northern reserve, continuing the pursuit until brought up by the fire of the infantry and artillery in rear. Meanwhile, the two squadrons of the Northern second line charged the two Southern

batteries, broke into them, and rendered them *hors de combat*, at least for the time being. The rifle battalion attached to the Southern Brigade now arrived upon the scene, and the cavalry on both sides, each with its screen of infantry in rear, retired to re-form. After a short rest and a few words of praise from the Emperor, the whole force was ordered to its bivouacs. The honours of the day were adjudged to have been divided.

I am conscious that in this account of a most interesting day there are many omissions. But, although the ground was exceedingly favourable for observation, the blinding dust made it simply impossible to view the operations as a whole. An English cavalry officer present said that never, even in India or Afghanistan, had he seen such clouds as rose behind every party of horsemen at the trot or canter. I may be excused, therefore, if my details are not absolutely accurate. Two things, however, I can vouch for, and these are the close cohesion of the charge, and the precision, notwithstanding the rapidity of the pace of every movement. If this cohesion, precision, and rapidity be borne in mind, I feel convinced that the incidents, however feeble the description, of this lively engagement, will give a fair idea of the efficiency of the Hungarian hussars.

On the next day, the first day of battle, the two brigades again met in conflict. On the 18th Brigade fell the task of extricating their defeated infantry. As they advanced they found the enemy's squadrons on the look-out, and the latter, probably having had more notice, were a little quicker in forming for attack. They had certainly time to form an offensive flank of four squadrons. The enemy seemed to advance in the usual formation—a strong first line and two *échelons* in rear. An English officer who was close at hand gave me the following note :—

The offensive flank was very rapidly formed, the three or four squadrons racing, though in beautiful order, to get to their position half-a-mile to the left. In the charge order was excellent—no horse broke. The 6th Brigade had the pace of the other, and the advantage of a slight slope downwards. The 18th retired almost directly the shock took place, going off at a gallop to escape the artillery.

The next day, as I related in my second letter, both brigades took part in the infantry fight, and here the initiative of the subordinate leaders was conspicuous. The two brigades met in full career, and the 6th was the weaker. This seemed to have been quickly recognised by the enemy's squadron leaders, for out of the dense dust of the *mêlée* two squadrons rapidly emerged, one riding for the batteries, the other falling on the flank of the infantry protecting them. "It is in holding back units, as it were, *en potence*," writes the cavalry officer already quoted, "that the Hungarian cavalry is so good. There always seemed to be fresh bodies at hand to clinch the matter. Patrols seemed to rise out of the ground, and join in the fight at the very nick of time."

No combined attack of a whole brigade was made upon infantry. The divisional squadrons (three to a division), however, were constantly employed in aid of the battalions, the most instructive point, perhaps, being the way in which such small bodies managed to conceal themselves,



and how very near they often came to effecting a complete surprise. Unfortunately, in manœuvres, where the strain on the nerves of beaten troops is practically *nil*, where everyone's head is cool, and infantry invariably retire in perfect order, cavalry, in the midst of heavy musketry, always appears at a disadvantage.

With all this good work, however, it is not to be understood that everything was quite perfect. On the second day of the manœuvres the Northern army occupied a defensive position, which, owing to the cliffs and woods, was very difficult to reconnoitre. In the open valley below only a few patrols were to be seen. The 18th Brigade, covering the march of the 4th Corps, evidently anticipated that the whole of the Northern cavalry would be found somewhere to the front, and, advancing in this expectation, was led into a trap. As I have said, only a few patrols were to be seen, and these rather hugged the foot of the heights. The brigade, nevertheless, formed for attack behind an undulation, and pushed boldly forward. If the commander believed that the enemy's squadrons were lurking somewhere behind cover, and that his challenge would draw them into the open, he must have been grievously disappointed. Not only did the valley remain untenanted, but two field batteries, hitherto perfectly concealed, opened at about 2,000 yards' range on his serried lines. He had certainly drawn the guns, and located their position; but rapidly and precisely as his retirement was effected, his long array of squadron columns must have presented a most admirable target. This incident, however, was most satisfactory to myself. I was, fortunately, in the middle of the plain over which the brigade advanced, and opposite an interval in the very centre of the first line. As the squadrons passed me on either hand they were moving at a fast canter, and I had a most excellent opportunity, despite the dust, of observing their dressing and cohesion, the riding of the men, and the general formation of the whole force. The first line was formed, I think, of five squadrons. Two squadrons followed, at about 100 yards distant, *en échelon* on either flank, and about 300 yards to the right rear came the reserve of two squadrons in "single column"—*i.e.*, in squadron columns one behind the other. On this occasion the first line was composed of a Honved regiment, but the dressing was excellent, and the horses perfectly in hand, the pace, as I have said, being a fast canter, which had been taken up 700 or 800 yards back from where I stood. I cannot say that the men were riding literally boot to boot, but the intervals between the files were very small, and the rear-rank, although three or four horses' length behind, had lost no unnecessary ground. I may say here that the Honved, high as is the standard to which it has attained, is by no means so good as the regular cavalry. I was much struck, however, with the ease and rapidity with which this regiment, when the advance was checked by the fire of the guns, formed line of squadron columns and fell back. From the drill point of view, the movement could scarcely have been better done.

Throughout the manœuvres the reconnaissance work was most intelligently performed, and, at the same time, both the front and flanks of the armies were well protected. It is true that officers' patrols, generally



of a subaltern and five or six men, were sometimes to be seen within their enemy's lines, and on one occasion I saw three battalions marching into position, with a hostile patrol watching them not more than 2,000 yards away. But incidents of this sort were very rare. It was certainly to the credit of the Northern cavalry that the advance of the division which turned the tide of battle on September 19th remained unsuspected, for the line of march, encompassed by high hills, was by no means easy to protect from view, and the enemy made strenuous endeavours to pierce the veil. This battle afforded an excellent illustration of the difficulties which may beset a general. Theoretically, he depends for information of his enemy's dispositions on his cavalry patrols. It is assumed that either the opposing horsemen will be driven from the field, or that some daring officer or adventurous scout will penetrate the line. Practically, the enemy's dispositions may be so carefully concealed and so securely covered that it is impossible even for the most reckless horseman to gain a point of observation, to detect the location of the opposing batteries, or even to ascertain whether the position is held in force or otherwise. In such circumstances what is left for a commander? He cannot bring his guns into action in order to prepare his attack, for they would have no objective. To throw forward his infantry would be a leap in the dark. A reconnaissance in force is not altogether satisfactory, for the troops employed may involve heavy reinforcements, and bring on a stubborn fight under most undesirable conditions.

One other resource remains, and this is the cavalry. It may not be able to penetrate the outposts, but that it may draw the guns has been shown by what occurred in the operation I have just described. That operation, however, can hardly be held up as a model for imitation. It will certainly be necessary for cavalry to sacrifice both men and horses in the quest for information, but it is by no means essential that an imposing mass of squadrons should be metamorphosed into a mere target for shrapnel. An incident that happened two days later will show how the omelette may be made satisfactorily without breaking so many eggs. On September 21st the Southern cavalry scouts, with all their activity, could find no way of procuring information. Only a few hostile infantry were to be seen on the wooded bluffs before them. There was nothing whatever to indicate whether the position was held by merely a small rear-guard or by a whole army corps. The key-point, a high and commanding hill, appeared especially solitary, and, could it be seized by infantry, the whole line would be turned. But before the infantry could be pushed forward over the open plain, it was absolutely essential to ascertain if the crest did not conceal both men and guns. This information was rapidly obtained by two squadrons. Trotting to within 800 paces of the hill, which was on the extreme right of the position, a battery opened fire upon them. They at once galloped further to the right, and a second battery gave tongue. Wheeling about, they then galloped in half-extended files to some friendly haystacks and thence to the cover of a wood. Why the artillery permitted itself to be drawn I cannot say. Possibly it was in order to prevent the hussars from

reaching a point which gave a view into the position. "How many men they would have lost," writes my cavalry friend, "I cannot say. About twenty rounds were fired at them. But had they all been sacrificed the game was probably worth the candle. They located two batteries; they ascertained that the ridge was occupied, and from this a great part of the army's position could be, and was deduced. There are more ways in which cavalry can be useful than in the charge."

The Hungarian horse is as well worth notice as the Hungarian hussars. He averages under 15'2, and, to all appearance, is lacking in bone and substance. But his endurance is remarkable. He is full of blood, and thoroughly realises the phrase "all wire and whipcord." More powerful men and horses, provided they got a fair opportunity, would probably gallop through the Hungarian ranks. But, as was said at the manœuvres by an experienced soldier, the Hungarian hussars would possibly gallop round their heavier antagonists, and would certainly keep on galloping when the latter were blown. The fine condition of the horses was especially noticeable. Like the infantry, they were perfectly fit for the most arduous field service, and, despite the hard work of the manœuvres, just as full of life and spirit on the last day as the first. What this means will be better appreciated when I add that the whole of the cavalry work, patrolling included, was carried out in marching order, and that there were no rest days during the week the manœuvres lasted. Another point is the excellence of their training. No doubt the Hungarians, who are born horsemen, ride as well as any cavalry in Europe. But unless the horses were most perfectly broken, I am certain that such excellent drill, such close cohesion and rapid rallying as the regiments exhibited, would be impossible. In the attack the opposing lines pulled up over and over again when they were almost touching; and, although the horses were never let out to the charge at manœuvres, still the pace was fast. I may notice too, that no matter how rough the bivouac, or how heavy the outpost duty, the horses always turned out well groomed, and there is no question but that the hussar is as good a horse-master as he is horseman. The only fault I could detect was that opportunities for easing the horses were not always taken advantage of. Whether it is that the saddles are high and the men short, or that the latter are over-weighted, the fact remains that they showed an evident disinclination to dismount. I saw very few sore backs indeed, and the squadrons maintained their strength throughout.

The armament of the hussars, in common with the rest of the Imperial cavalry, is the sabre and magazine carbine. The lance has been long discarded, even in the Uhlan regiments. The carbine is carried slung over the dolman, and is kept in its place by a strap on the waist-belt, which is wound tightly round the small of the butt. For dismounted action there was little opportunity. On one occasion only two squadrons fought on foot, and I was unable to observe whether their fire discipline—an all-important point in dismounted fighting—was good or otherwise. As regards drill I noted nothing new. In several respects I think our own superior. In wheeling and in changing direction the pivot appeared

to check the pace—a possible gain in precision, but a certain loss of rapidity. The silence, however, which characterises every movement was as noticeable as in the infantry, and the trumpet was never used. Space forbids my entering into further detail. Nor can I here discuss the suitability of the formations employed, or do more than allude to the much-vexed question of attaching mobile infantry to the independent cavalry. I cannot say that the chief objection—*i.e.*, that the presence of the rifleman cramps the horseman—made itself conspicuous in the manœuvres. On the contrary, in the cavalry engagement near Balassa, the former contributed most useful assistance, and in the wide reconnoitring operations of the previous day it was certainly no incubus. To my mind, the whole question hinges on the nature of the country in each particular case, and on the distance of the cavalry in front of its own army. At the same time, a practice undoubtedly most useful, which obtains in the Austro-Hungarian as well as in the German army, clearly proves the value of mounted infantry. Cavalry, as outpost and battle patrols, are attached to each infantry regiment. That mounted scouts are absolutely necessary in these days of long-range rifles I am firmly convinced. Men on foot cannot be sent so far to the flank as to reconnoitre all the localities from which volleys might be fired into the marching column; they cannot maintain close and constant touch with adjoining units, nor is the communication quick enough between patrols on foot—especially at night—and the camp they cover. But this is surely the proper sphere for mounted infantry. Men thoroughly trained to such duties, working with their own regiment, and understanding infantry methods, would be far more useful than a few troopers casually detailed. Above all, there would be no waste of cavalry, and every single sabre would be available for the even more important duty of defeating the enemy's squadrons and reconnoitring his position.

## VI.

It may have been observed that the horse artillery batteries attached to the cavalry brigades had rather a rough time. To my own knowledge they were ridden into no less than four times in three days, and they certainly took their share of all the hard knocks that were going. The boldness with which they were handled had much to do with their exposure to attack, but I think that the cavalry was sometimes to blame. I suspect that now and then, in the hurry of the moment, special escorts were not told off, or that, attracted by the *mêlée*, they left the guns to protect themselves. Further, the attacks on the guns were always made in sufficient strength to allow a flank attack in close order to be combined with the frontal attack in extended files. There was little opportunity in the manœuvres for coming to the conclusion as to the mobility of the horse artillery. It certainly manœuvred rapidly for short distances, but both in limbering and unlimbering it was slow. However, in the cavalry engagements it certainly did good work, and, as regards mobility, compares well with the horse artillery of other Continental

Powers. At the same time, in this respect it is a long way behind our own.

The field artillery, to which I have already referred at some length, is in no degree less efficient. I had many opportunities of observing it closely in all phases of the battle, and the rapidity and precision of the movements left little to be desired. The batteries are not afraid to gallop, the driving is excellent, and the impression left on my mind is that the Austrian is, next to the English, the most mobile artillery in Europe. In seeking points of vantage the batteries are not deterred by difficult ground. During the rear-guard action amongst the wooded ridges on September 21st, directly the right wing of the attack came into action, four divisional batteries suddenly opened fire from a very steep conical hill which rose to the right rear of the advancing infantry. It was just the position for mountain-guns, but I certainly never anticipated that the little Hungarian horses would have been able to drag the heavy field-pieces up such a gradient. The very short interval which occurred between the word to unlimber and the first shell was very generally noticed. It was certainly smart, on several occasions not more than thirty seconds; but I cannot help thinking that careful laying was often sacrificed to appearance. Still, on the whole, the fire discipline and control was good. In ordinary circumstances, due deliberation was observed, targets clearly pointed out, and the principle of concentrated fire consistently adhered to. In movement the batteries are directed by signs, and here again absolute silence is the rule. With respect to tactics, the Austrian regulations are evidently in close accord with our own. The positions were invariably well chosen; the guns were unlimbered in the rear of the crest, whenever the lie of the ground permitted, and run up by hand. Indirect laying is largely used, and a pole for this purpose is carried on each gun-limber. The artillery bombardment was generally carried out by concentrating a mass of guns against a section of the defender's front. This mass as a rule consisted of the corps artillery (four batteries), and the artillery of two divisions (eight batteries).

The third division was usually employed in a turning movement, and took its batteries along with it. On more than one occasion the very extended front occupied introduced a tactical difficulty. The massed guns, if posted on one flank, could do nothing to assist the troops upon the other flank, or even in the centre. If posted in the centre the wings were left without support. For instance, in the first battle, the 4th Corps massed twelve batteries against the defender's left. On their own left was a long line of woods and copses which not only completely divided them from their own centre, but actually concealed that centre. Had the defender made a counter-stroke he would have had only infantry to contend with, and would have been supported by several batteries established in the centre of his own line, which were at least 5,000 yards distant from the massed batteries of the attack. So open was the ground, generally speaking, that the artillery duel sometimes began at very long range, 4,500 yards at least; but such distant positions were not long

maintained, and the duel was fought out between 3,500 and 2,500 yards. I may remark that the artillery—economy being the order of the day—used the old powder, and the obsolete conditions brought about by clouds of smoke, whilst adding to the picturesqueness of the operations, detracted much from their value for instruction. In connection with our own change in artillery draught, it may be interesting to observe that the pole appears a good deal shorter than the German, and, if I am not mistaken, a little higher. This, together with good driving, may account for the rapidity of movement over difficult ground. It may be remembered that at Königrätz a large number of batteries were said to have been captured because the limbers were too far to the rear. In the manœuvres I never saw either limbers or wagons more than a hundred yards or so behind the guns, although a portion, as a rule, were beyond the flanks; and I could not help wondering whether the disastrous experience of the great Bohemian battle outweighs the dread of modern shrapnel.

I have hitherto done no more than allude to the presence of the Honved regiments in the manœuvres. In some respects they were the most interesting feature of the whole. The normal organisation of an Austro-Hungarian army corps is two infantry divisions and three squadrons. But both the 4th and 6th Corps were reinforced by a third division of Honved, and a regiment of Honved cavalry joined the 18th Cavalry Brigade. The war strength of the Imperial army is about 1,000,000 men. In second line come the Austrian Landwehr and their Hungarian equivalent, the Honved. These troops have hitherto, as elsewhere on the Continent, been accounted available for the lines of communication, blockading or holding fortresses, and the like. Their number, roughly speaking, is about 450,000. But, by a stroke of the pen, Austria has added these 450,000 men to her first line, and the army actually available for active operations will amount in a very short space of time to 1,500,000 men, the Landsturm, composed of men over thirty-five years of age, being brought into second line. This extraordinary increase is made possible by giving the Landwehr and Honved an extended training. Hitherto the Landwehr soldier, with the exception of those who have served with the colours, has had to serve but one year with his own corps, supplemented by annual trainings of a month. These troops, notwithstanding the presence of a considerable proportion of old soldiers, have been decidedly inferior to the line, especially as regards officers. The Honved, on the other hand, have for some time past served for two years. In December of last year it was enacted that the service of the Landwehr also should be extended to two years, as the efficiency of the Honved battalions is considered of sufficiently high standard to enable them to take their place in the active army. The supply of officers is, of course, the great difficulty. But to this point due attention has been paid. The battalion commanders, I believe, are permanently employed, and all the officers are educated at the Landwehr and Honved cadet schools. The course lasts two years in Austria and four in Hungary. A certain number of subalterns, also, are permitted to join the Staff College after

going through a special training, and for captains there are courses both in Vienna and Budapest of six or seven months, similar to the field officers' and cavalry courses for the permanent army. That officers so trained are as good as those of the line regiments is not to be expected, but that they are the best "second line" officers in Europe I am absolutely convinced, and there can be no doubt that, once their rustiness has rubbed off on service, their practical knowledge and familiarity with command will be quite sufficient to enable them to lead their men with confidence and judgment. The excellent discipline of the troops is much in their favour. The men have acquired the instinct of prompt obedience; they all know what is required of them, and many of them are comparatively old soldiers. Indeed, the only difference between the Honved and the line which appeared in the manœuvres was that the battalions of the former worked with a little less precision, and that there was more noise.

But it is the Honved cavalry that is the cream of the system. The men serve for two years. Of the horses 220 per regiment are permanent, but the remaining 800 (each regiment is over 1,100 strong) have only five months' training, and are then handed over to private individuals, who have to send them up for four weeks' training annually, and whose property they become, if they have been always sent up in good condition, at the end of six years. The twelve squadrons present at the manœuvres showed to great advantage. "Their work," says the cavalry officer I have already quoted, "was excellent, and it was only on comparing them critically and closely that it was seen they were not regulars." It is to be noted, too, that only a small proportion of the officers and men were undergoing their two years' course; three-fourths of them were out for their month's training. But in such a horse-loving and horse-using country the men do not forget their horsemanship when once they have left the colours. To my mind the horses are the most remarkable feature of the Honved regiments. They seem to be just as well broken as those of the regulars and just as handy. In any case, it will hardly be disputed that this second line cavalry, numbering 10,000 sabres, would prove a powerful reinforcement to the forty-two regiments of regulars. Fifty thousand horsemen, the finest light cavalry in Europe, as well-trained in reconnaissance as in manœuvre, hardy, enterprising, and well led, add an element of strength to the Imperial army, the value of which it is difficult to over estimate. If it be taken into account that the artillery compares favourably with the best upon the Continent, that the infantry is both mobile and well disciplined, that the armament of the troops leaves little to be desired, that the supply and transport departments are well-organised, that the staff is highly trained, and that the leading of the troops is rapidly approaching the highest standard, it is evident that the dual Monarchy is far better prepared for war than at any previous period of its existence, that as an ally it is more valuable, and as a factor in the European situation of even greater weight. Nor should it be forgotten that these results have been attained under a system of administration as economical as it is efficient. Of the great Powers, Austro-Hungary has by far the smallest Budget.

I may, perhaps, be permitted, in conclusion, to reply to certain inquiries which these articles have elicited. The long marches accomplished by the infantry without straggling, or with a very small percentage of casualties, seem to have attracted attention. In answer to the question "How is it done?" I can only repeat my former statement that the root of the whole matter is in systematic training. The quality and make of the men's boots, as well as the fit of their valise-equipment, are certainly of importance, but it must be remembered that there were armies who could march just as well as the Austro-Hungarians of to-day, if not better, in days when the men were badly shod, laden with clumsy knapsack, and half strangled by a leather stock. To take some instances from the Peninsular campaigns. The Light Brigade is said by Napier to have made sixty-two miles in twenty-six hours on the march to Talavera, and later, in pursuit of Soult, the same battalions marched forty miles in nineteen hours over mountain roads, though here "many men fell and died, convulsed and frothing at the mouth." The historian also records that before Salamanca Marmont's army covered fifty miles in forty-eight hours, and there are many other almost as remarkable achievements credited to both the English and the French. Nor do later wars show any falling off in this respect. In America, for instance, Sherman's army marched 190 miles in seven days, an average of over twenty-seven miles a day, and Stonewall Jackson's army corps once did sixty miles in forty hours. In 1866 the Prussian infantry traversed twenty-five miles a day for several days in succession, and marches of even greater length were by no means uncommon in 1870. I cannot help thinking, if a march of twenty miles in heavy marching order has come to be considered a remarkable feat, that the standard of endurance demanded from the troops is much lower than heretofore. But this is by no means generally true. In France and Germany, as well as in Austro-Hungary, a march of twenty miles (32 kilomètres) is nothing abnormal, and a battalion that could not cover this distance for several days in succession would hardly be considered fit for service. Generals who are aware that "battles are won by the legs" would scarcely be likely to report favourably on such a drag on all manœuvring. I may add that the boot worn by the Austro-Hungarian infantry seems in no respect superior to our own, and is probably not so good. The only good point I know about their method of fitting the men is that the lace-holes are not pierced before issue, and the soldier can thus fit his boot to his instep. The light boot with canvas uppers, which each man carries, is, however, a distinct advantage. It was much worn in the manœuvres, and very possibly many men who would otherwise have fallen out were enabled by this change of foot-gear to keep their places in the ranks. The pack, too, is certainly heavier than our own equipment, but it "rides" well, and does not appear to cause any unnecessary discomfort to the soldier.





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## THE VICISSITUDES OF REGIMENTAL COLOURS.

By Major R. HOLDEN, 4th Bn. Worcestershire Regiment.

## PART II.

**H**ITHERTO unrecorded chapter in the history of regimental colours remains to be written. It is undeniable that, while regimental histories very properly give prominence to the gallant deeds which have made their battalions famous, in the majority of cases the writers preserve silence as to the circumstances in which colours have been unfortunate enough to fall into the hands of the enemy. Much misconception having arisen and injustice having in consequence been done to many gallant regiments, respect for the memory of brave men seems to demand an accurate representation of the circumstances attending each instance, so far as they can be ascertained. A notion appears to prevail in the minds of some regimental officers that the loss of their colours necessarily involves a stain upon the honour of the corps. Surely, this is a mistaken view of the situation, for the history of the British Army reveals few instances attended with circumstances of which the regiments concerned have cause to be otherwise than proud. Nearly every case brought to light in this article might be recorded in large letters without any loss of prestige or honour to the regiments interested.

The Royal Regiment of Foot Guards of Charles 1st is said to have lost eleven of thirteen colours at Edgehill in 1642<sup>(1)</sup>; and there is no doubt that the Royalists lost many colours at Preston, Dunbar, and Worcester, for the trophies were hung up in Westminster Hall until the restoration<sup>(2)</sup>. It is perfectly well known that the Allies lost many standards and colours in the war of the Spanish Succession, but in circumstances far more honourable than is generally imagined<sup>(3)</sup>.

At the battle of Landen, fought on 19th July, 1693, Prince George of Denmark's regiment, now the Buffs, lost three colours. It was attacked by a brigade of infantry and several regiments of dismounted dragoons, and in this unequal conflict with superior numbers two of the ensigns carrying the colours fell, the third officer was surrounded and taken

(1) Bulstrode, p. 83.

(2) Mackinnon's History of the Coldstream Guards, Vol. 1, p. 94.

(3) According to a catalogue of exhibits in the Zenghaus in Vienna, in 1846, there was an English colour, bearing a white cross between four obliques, in red and blue half fields. It was made of silk, and was found in the knapsack of a French Grenadier when the Austrian troops, at the end of the eighteenth century, captured a French Grenadier Regiment in the Netherlands. It is very unlikely to have been a British, and corresponds far more with many French colours described in Le Comte de Bouillé's *Les Drapeaux Français*.—R. H.

prisoner, and the three colours were captured<sup>(1)</sup>; but the circumstances are those of which the regiment should be proud. The same regiment behaved with gallantry at the battle of Ramillies, fought on the 23rd May, 1706, but again unfortunately lost its colours, which were captured by Clare's Irish Regiment in the service of France—a most gallant regiment. Lord Clare, who commanded the Irish, behaved with great bravery. He cut his way through the English regiments, and was mortally wounded in his heroic effort to save his regiment. His Lieut-Colonel, Murrough O'Brien, who then assumed the command, led on his men with fixed bayonets, broke through the English ranks, captured the colours of the Buffs, and joined the rear of the French retreat on the heights of St. André. The colours were for many years suspended in the Church of the Irish Benedictine Nuns, at Ypres<sup>(2)</sup>.

At Almanza, in 1707, several British regiments surrendered with their colours, including the Guards, Borrs' Marines (now 1st Battalion Duke of Cornwall's L.I.), Portmore's (now Queen's, Royal West Surrey), Southwell's (now Royal Warwickshire), Stewart's (now Norfolk), Hill's (now Devonshire), Blood's (now Leicestershire), Mordaunt's (now 1st Battalion Gloucestershire), Wade's (now 1st Battalion West Riding), Gorge's (now 1st Battalion Royal Sussex), Allnutt's (now 2nd Battalion Worcestershire), and other regiments since disbanded<sup>(3)</sup>. But it is satisfactory to know that all these trophies were recovered in 1710. On the entry of the army into Madrid in September, the Archduke Charles paid a visit to the church of Atocha, "much renowned throughout Spain for its sanctity, and decked with all the standards lost by the Allies at Almanza"<sup>(4)</sup>. The army left Madrid on the 11th November, taking these precious relics with them, "as the reward for their exertions and trophy of their labour"<sup>(4)</sup>. Almanza was a disaster. After a battle lasting two hours the Allies were broken at all points, and their defeat complete. But let no one say that the British regiments behaved otherwise than with their proverbial bravery. Their loss was very heavy, and, deserted by the Portuguese, most of whom ran without firing a shot, they inevitably succumbed to the superior numbers of the enemy.

At the defeat of La Gudina, commonly known as the Caya, fought on 7th May, 1709, the Earl of Galway's Brigade, consisting of his own regiment<sup>(5)</sup>, Colonel Thomas Stanwix's<sup>(6)</sup>, and the Earl of Barrymore's (now the Somersetshire Light Infantry), surrendered to the French and Spaniards, and all three regiments lost their colours in circumstances honourable to their reputation. They behaved with more than ordinary bravery, surrendering to superior numbers only when they were cut off

(1) D'Auvergne's Campaign in Flanders.

(2) O'Connor's Military Memoirs of the Irish, p. 317. History of the Irish Brigade, p. 237.

(3) Parnell's War of the Spanish Succession, p. 221.

(4) Mahon's War of the Spanish Succession, pp. 316, 328. Colonel Davis, F.S.A., the historian of The Queen's, kindly drew my attention to this.

(5) Afterwards disbanded.

(6) Disbanded in 1713.

from the Allied army, deserted by the Portuguese, and surrounded by opponents <sup>(1)</sup>.

At Fontenoy, in 1745, the colours of the 1st Battalion of the Coldstream Guards were captured by Count Francis Bulkeley's Irish Regiment in the service of France <sup>(2)</sup>. Though the Allies were defeated and forced to retire, neither the British infantry, upon whom the brunt of the fighting fell, nor their leader, had any reason to be ashamed of the events of that hard-fought day. The encounter between the British infantry and the Irish Brigade, sent forward by Marshall Saxe as a last resource, was fierce, the fire constant, and the slaughter great; but the loss on the side of the British was such that they were at last compelled to retire.

General Barrell's regiment (now the King's Own Royal Lancaster), should be proud of the circumstances attending the loss of one of its colours at the battle of Culloden on the 16th April, 1746, where it fought with distinguished bravery. Having to bear the brunt of a furious onset of the clans, for a moment it was staggered by the weight of the attacking column, and during this critical period one of the colours was captured. Every human effort was made to preserve it, and Lieut-Colonel Robert Rich, commanding the regiment, had his hand cut off and his head cut open by a stroke from a claymore in his endeavours <sup>(3)</sup>. At Val, fought on 2nd July, 1747, the French took sixteen colours and standards from the Allies, but there is nothing to show that they belonged to British regiments.

On the surrender of Fort Oswego to the French under Montcalm, in 1756, Shirley's and Pepperell's regiment, the 50th and 51st, afterwards disbanded, delivered up their colours. But it appears that on the capitulation of Montreal to Amherst in 1760, two of them were recovered <sup>(4)</sup>. These two Provincial regiments were raised in 1754, and "though paid by the king and counted as regulars, were, in fact, raw provincials raised in the colonies, and wearing their gay uniforms with an awkward, unaccustomed air" <sup>(5)</sup>. Both regiments were disbanded, or, more properly, ceased to exist, on their surrender in 1756.

Perhaps the American War of Independence was attended with more disaster to British colours than any other campaign of the last hundred and twenty years. On the surrender of Fort Chamblé to the Americans in 1775, the 7th Royal Fusiliers were compelled to deliver up their colours. Fort Chamblé was a small outpost garrisoned by one company only, and being in no condition for defence, surrendered honourably to superior numbers. The same regiment was unfortunate in losing its next set of colours to the rebellious colonists six years

<sup>(1)</sup> History of the Irish Brigade.

<sup>(2)</sup> French Official Gazette, 24th May, 1745. History of the Irish Brigade, p. 360.

<sup>(3)</sup> History of the Irish Brigade, p. 448; and Letter of Captain-Lieutenant T. A. Lee, 22nd April, 1746.

<sup>(4)</sup> R.U.S.I. Journal, 1887. Vol. 31. Capt. Knox's Journal. Vol. II., p. 442.

<sup>(5)</sup> Montcalm and Wolfe. Vol. I., p. 320.

later at Cowpens, an action fought and lost in 1781, not through any lack of bravery of English officers and men, but to causes the responsibility for which rests chiefly upon Tarleton, the British commander. Both of these sets of colours are to this day carefully preserved by the Americans in West Point Academy <sup>(1)</sup>.

With Burgoyne's disastrous surrender at Saratoga in 1777, the 37th (now the 1st Battalion Hampshire), with other regiments which had not secreted them, delivered their colours to the Americans. Here again a force, reduced to 3,500 fighting men, of which only half were English, with provisions almost exhausted, and no hope of a fresh supply or of relief, honourably surrendered to an army four times greater in point of numbers, and marched out of camp with the honours of war.

When the war was at its height in 1777-8, the English and Irish coasts were infested with American privateers, who effected considerable damage, and kept the seaward counties and smaller seaports in a constant state of alarm. When the old 81st, or Aberdeenshire Highlanders, raised in 1777, were on a passage to Ireland, their first colours fell a prey to one of these freebooters <sup>(2)</sup>, said to have been the famous Paul Jones.

In 1779, the 16th, now the Bedfordshire Regiment, lost its colours on the surrender of Baton Rouge, in West Florida, to the Spaniards, who had recently joined the confederacy against Great Britain. In this instance the English force consisted of 500 men only, and the place was untenable against the heavy cannon of the Spanish troops, which numbered more than 2,000 men <sup>(3)</sup>.

The 17th, now the Leicestershire Regiment, lost its colours in honourable circumstances in the same year. The regiment was stationed at New York and other posts in the vicinity of that city, and when Stoney Point, a fortified post on the river Hudson, had been captured by the British troops, the 17th, commanded by Lieut-Colonel Henry Johnson, was placed in garrison at that fort. On the night of the 15th July, 1779, this post was suddenly beset by nearly 4,000 Americans, under General Wayne, who assaulted the works. The regiment made a gallant resistance, but was overpowered by superior numbers, made prisoners of war, and compelled to surrender its colours <sup>(4)</sup>.

When Cornwallis' army, of a little more than 3,200 of all ranks fit for duty, surrendered honourably to General Washington, at York Town, in 1781, whose force comprised over 20,000 French, Colonials, and Militia, the following regiments marched out with all the honours of war:—Guards (detachments from the three regiments), 17th (now Leicestershire), 23rd (Royal Welsh Fusiliers), 33rd (1st Battalion West Riding), 43rd (1st Battalion Oxfordshire L.I.), 71st or Fraser's Highlanders (disbanded in 1783), 76th or Macdonald Highlanders (disbanded in

<sup>(1)</sup> The 7th Fusiliers is one of the few regiments which records the loss of its colours in its Regimental Record.

<sup>(2)</sup> Inspection Returns, 81st Regiment, Fort Kinsale, 6th November, 1778.

<sup>(3)</sup> Cannon's History of the 16th Regiment, p. 21.

<sup>(4)</sup> Milne's Standards and Colours of the Army, p. 113.

1784), and the 80th or Royal Edinburgh Volunteers (disbanded in 1783). They were marched out "with shouldered arms, colours cased, and drums beating a British march" (1). The 23rd and 33rd regiments failed to deliver up their colours, as explained in Part I. of this article, p. 34; but what happened to the others has not transpired.

On the 26th and 27th November, 1781, the Dutch island of Eustathius, in the West Indies, was captured by a French force under the Marquis de Bouillé, in consequence of the neglect of the Governor to adopt ordinary precautions. This official, Lieut-Colonel James Cockburne, 35th Foot, was captured as he was taking his morning ride, and the garrison, consisting of the battalion companies of the 13th (2) and 15th (3) regiments, surrendered prisoners of war after a resistance in which several were killed. The garrison, deceived by the appearance of the Irish regiments in the service of France, who were dressed almost exactly like English troops, permitted them to come close by them on the parade-ground. Six hundred and seventy-seven men were on this occasion made prisoners of war and subsequently enlisted in the Dillon and Walsh regiments in the French Army. The colours of the 13th and 15th regiments fell into the hands of the French, entirely through the incapacity of the Governor, who, in 1783, was tried by court-martial and cashiered. The Marquis de Bouillé made much of his good fortune, and returned triumphant to France with the four colours (4). Strange to say, neither Cannon's nor Carter's Histories of the 13th Light Infantry make any allusion to the affair.

The 12th Madras Native Infantry lost its colours when Cuddalore, without any attempt being made to defend it, surrendered to the French on 4th April, 1782. But, curiously enough, on the capture of Pondicherry on 22nd April, 1793—eleven years later—they were recovered along with ten of the enemy's colours taken at the same time. These were one colour of the National Guard, "*Le peuple Français—La Liberté, ou la mort*"; two colours of the Regiment Servans dans l'Inde, "*Discipline, et obeissance a la Loi*"; two colours of a corps of Sepoys, "*Discipline, et obeissance a la Loi*"; two flags carried before the Governor when in procession; two colours of the Regiment de Bourbon; and one flag of the Fort of Pondicherry (5).

On 3rd May, 1783, the Garrison of Bednore, under command of Brigadier-General Matthews, Commander-in-Chief of the Bombay Army, surrendered after a gallant defence to Tippoo Saib. Included in the capitulation were the 98th (Colonel Fullarton), the 100th (Colonel Hon. Thomas Bruce), and the 102nd (Colonel Rowley), all of which lost their colours, but have since been disbanded.

At Guadaloupe, in the West Indies, in 1794, the British garrison, under Major-General Graham, had to stand on the defensive against a

(1) Article III. of the Capitulation, 19th October, 1781.

(2) Now Somersetshire Light Infantry.

(3) Now East Yorkshire Regiment.

(4) History of the Irish Brigade, p. 628.

(5) Wilson's History of the Madras Army, Vol. II., pp. 65 and 245.

superior force which arrived from Europe, under the French General, Victor Hughes. After a series of unsuccessful operations, chiefly caused by the dreadful mortality among the troops, those that remained, of which the majority were either sick or convalescent, were compelled to surrender to the enemy at Berville camp, and marched out with all the honours of war. Some idea of the condition of the British may be gathered from the fact that of a strength of 1,764 men in garrison, only 389 were fit for duty, and several companies were unable to produce a single effective file. The British regiments represented were portions of the 35th, the 39th, 43rd, three companies of the 56th, and the 65th regiments. The colours of the 39th were saved by Captain George Bell, and some other officers escaping with them in an open boat to the Islands of the Saints, whence in the following year, they proceeded to Ireland <sup>(1)</sup>; but those of the 43rd, now 1st Battalion Oxfordshire L.I., and 65th, now 1st Battalion York and Lancaster <sup>(2)</sup>, fell into the hands of the enemy.

On the 11th August, 1806, the 1st Battalion of the 71st Highlanders, now 1st Battalion Highland L.I., which formed part of the small force under Brigadier-General (afterwards Lord) Beresford at Buenos Ayres, in South America, was forced to capitulate in circumstances most honourable to its distinguished reputation. After a gallant resistance, the regiment retired into the fort, where, being bereft of all resources and having no hope of support, it surrendered to the enemy, and was permitted to march out with the honours of war, and lay down its arms in the square. The colours, which were taken possession of by the enemy <sup>(3)</sup>, were deposited, and are to this day to be seen, in the great church of San Domingo, in the Calle Defensa. With a standard bearing the letters "R.M.B." and three more British colours taken in 1807, they are hanging under glass, in massive gold frames, on the six pillars in the nave of the church <sup>(4)</sup>. The letters "R.M.B." are presumed by some to mean Royal Marine Battalion, as a detachment was landed at the time, but this is extremely doubtful. The three other colours alluded to are said to be those of British regiments which were unfortunate enough to form part of Lieut-General Whitelocke's force sent to recapture Buenos Ayres in 1808. The circumstances of this disaster are well known. The troops displayed great intrepidity, but the enterprise failed. A large number of men were taken prisoners, some regiments lost their colours, and a disgraceful agreement was entered into with the Governor by General Whitelocke, whose conduct subsequently became the subject of enquiry by a court-martial, and

<sup>(1)</sup> Cannon's History of the 39th Foot, p. 41.

<sup>(2)</sup> *Naval and Military Magazine*, 1828, Vol. IV., p. 64.

<sup>(3)</sup> The *Madrid Gazette* of 20th December, 1806, says "we have further taken from the enemy twenty-six pieces of cannon and four howitzers, and the colours of the 71st Regiment, which we have dedicated to Our Lady of Rosario." See also Lieut-General J. Floyd's speech on presenting new colours to the 71st on 26th April, 1808. One of the Pipe banners taken on the same occasion was gracefully restored to the regiment in 1881.

<sup>(4)</sup> Letter of Colonel Howard Vincent, C.B., M.P., in the *Globe*, 26th October, 1893.



he was cashiered. The feeling against him amongst all ranks of the Army was very strong, and a popular toast at the time was "Success to Grey-hairs, but bad luck to White-locks!" The 36th did not surrender their colours on this occasion, as is clear from the correspondence which ensued with the Herald's College in 1807 <sup>(1)</sup>, and from the Chaplain's remarks on the presentation of new colours to the regiment in 1862 <sup>(2)</sup>. The 88th Connaught Rangers also preserved theirs, the following occurring in Lieut-Colonel Alexander Duff's evidence at the Court Martial:—"I had so bad an opinion of the attack in my own mind, that I left the colours at headquarters, fearing they might be taken" <sup>(3)</sup>.

General the Marquis of Londonderry, in his Narrative of the Peninsula War, says that at one period of the battle of Albuhera "we had lost a whole brigade of artillery, a large number of prisoners, and eight stand of colours belonging to the Buffs, the 66th, the 48th, and 57th Regiments," but that the Fusilier Brigade, in its grand advance on the hill occupied by the enemy, "retook the whole of the captured guns, with the exception of a single howitzer, and three out of the eight stand of colours which had been lost." This statement is incorrect in many respects. The Buffs for a time lost their regimental colour, while the King's colour, stripped from the pole, was lying unnoticed under the apparently lifeless body of Lieutenant Latham; but the former was recovered from the French, and the latter picked up by the 7th Fusiliers. Both colours were in possession of the Buffs in 1814, as is proved by the Inspection returns. The colours of the 1st Battalion 57th were never lost, though shot to tatters, as was proved by Lieut-General Sir William Inglis to the satisfaction of Lord Londonderry in the correspondence on the subject published in the appendix to the third edition of his work. The colours, which were subsequently presented to Sir William Inglis, who commanded the regiment in the battle, were exhibited in the Military Exhibition at Chelsea in 1890, and are now in the possession of his grandson, Captain W. R. Inglis, Adjutant, 4th Battalion Norfolk Regiment. They were so shattered that it was found necessary to replace them in 1813 by a new set, which were carried in the regiment up to about 1824. With those of the 2nd Battalion, used from 1804 to 1815, they were presented to General Sir Hew Dalrymple, Bart., colonel of the regiment from 1811 to 1830. They are now in the possession of his great grandson, Captain Arthur D. Fanshawe, R.N., A.D.C. <sup>(4)</sup>.

It is difficult to account for the colours of the 2nd Battalions of the 48th and 66th Regiments, which are supposed to have fallen into the hands of the French. Mr. Milne, in his Standards and Colours of the Army, says that those of the 66th were sent to England after the battle,

<sup>(1)</sup> Carr's Records of the 36th Foot, p. 129.

<sup>(2)</sup> Volume of Newspaper Extracts, R.U.S. Institution.

<sup>(3)</sup> Proceedings of the Whitelocke Court-Martial, p. 374.

<sup>(4)</sup> An illustration of these colours is given in Milne's Standards and Colours of the Army.

and on the return of the battalion to England in 1814, were forwarded to the headquarters and lost. But, on the other hand, the Confidential Inspection Reports show that new colours were issued to both the said battalions in 1812.

The 69th, now the 2nd Battalion of the Welsh Regiment, had the bad fortune to lose one of its colours in 1814, and another one in 1815; but neither of them in circumstances of which the regiment need feel otherwise than proud. The regimental colour fell a victim during the assault upon the Fortress of Bergen-op-Zoom, in 1814; it is now in the Hospital of the Invalids, in Paris, along with the colours of the 4th Battalion The Royal Scots, lost on the same occasion. This celebrated surprise, though unattended with success, is still memorable for the gallantry displayed in its execution, as well as in the causes which led to its ultimate failure. It was a place long deemed impregnable, and the bravery, steady discipline, and excellent order maintained by the assailants during the obscurity of the night, and whilst surrounded by the almost irresistible temptations of plunder and liquor, were not soon forgotten.

It was a cruel fate which decreed that the 69th should lose the King's colour of another set a year later at Quatre Bras. The regiment was formed on the Nivelles Road, and had, in pursuance of orders, from its Brigadier, Sir Colin Halkett, formed square, in anticipation of the French cavalry, when the Prince of Orange cancelled the order, and made the regiment deploy. During this very movement the enemy's cavalry emerged from the wood on the right of the road, and, before the regiment could get into square again, the ranks were broken, ridden over, and sad havoc made among them. Indeed, but for the timely assistance of a battalion of the Guards, not a man, save the colonel and the adjutant, would have escaped. "Suddenly the ridge in front grew dark with huge, strait-sworded, steel-clad horsemen, and through the tall and tangled rye there swept the 8th Cuirassiers of Kellerman's division. Before this rush of horses no men in line could stand. From right to left the regiment became a shapeless wreck; the Cuirassiers swept on towards Quatre Bras, bearing with them a single colour, and one hundred and fifty dead and dying men remained amidst the blood-stained rye, to attest the impetuosity of French cavalry, and the imbecility of a Dutch Prince" (1). It was in the midst of the confusion that a French trooper, named Lami, captured the King's colour, which is also in the Hospital of the Invalids, in Paris, and in defence of which Major Lindsay (2), Lieutenant Pigot (3), and

(1) "Rambles through Belgian Battlefields"; Siborne's Waterloo, 3rd edition, 1847, p. 93; Waterloo Letters, by Maj.-Gen. H. T. Siborne, R.E., 1891; and Journals of Major E. M. Macready, 30th Reg., Colburn's *U.S. Magazine*.

(2) Major Henry Lindsay entered the Army as Ensign 84th Reg., 1794; became Lieut. Hon. R. Ward's Reg., 1794, Lieut. 91st Reg., 1795, Capt. 69th Reg., 1803, Brev. Major 1814, placed on half-pay 1819, died 1827-31.

(3) Major Broke Pigot joined the 69th Reg. as Ensign 1810, became Lieut. 1811, Captain 1826, Captain h.p. 1840, Brev. Major 1854, died 1857.

Volunteer Clarke <sup>(1)</sup> highly distinguished themselves, and were desperately wounded.

The 33rd was very nearly in the same predicament. On the advance of the French Cuirassiers it entered the wood and dispersed, there being no time to form square. Some of the regiment were cut off and made prisoners, and the King's colour captured. But the Frenchman was shot by a corporal named Holdsworth, who stripped the colour from the staff and gave it to an officer, who escaped with it to the wood. For this act the corporal was granted an extra 4d. a day to his pension <sup>(2)</sup>. Sir Colin Halkett seized the white regimental colour, waved it over his head, and re-formed the regiment outside the wood <sup>(3)</sup>, though not before his horse was shot under him.

Allusion has already been made to the almost providential manner in which Lieutenant Souter preserved the regimental colour of the 44th (now 1st Battalion Essex) Regiment during the awful retreat from Cabul, and during his subsequent captivity. An attempt was made at the same time to preserve the Queen's colour, which was torn from the staff and secured round the body of a trusty colour-sergeant. But this faithful soldier fell a victim to the bloodthirsty Ghilzyes during the night of the last march, and amid the snow, the confusion, the butchery, and the darkness, his sacred trust was never recovered. Of six hundred and eighty-four men of all ranks of the 44th, at Cabul, on the 1st October, 1841, six hundred and thirty-two perished, besides twenty-two officers.

At Chillianwallah, in 1849, where the 24th lost twenty-three officers and upwards of five hundred rank and file killed and wounded, the Queen's colour was lost and never recovered. Ensigns Phillips and Collis, who carried the colours, and all the sergeants of the escort, were killed in the advance. Private R. Perry brought in the regimental colour, for which distinguished service he was promoted to sergeant, and received an annuity. The Queen's colour is said to have been secured round the body of Private M. Connolly, who was subsequently killed; and it is a consolation to know that it does not appear to have fallen into the hands of the Sikhs. It was impossible, said Sir Colin Campbell, for any troops to have surpassed the regiment in gallantry. One half of the men and two-thirds of the officers were killed or wounded; and no one can tell the awful amount of suffering endured by the wounded during the night after the battle <sup>(4)</sup>.

<sup>(1)</sup> Lieut. Christopher Clarke became a Volunteer in the 69th Reg., 1815, Ensign 42nd Reg., 1815, Lieut. 1823, Lieut. 33rd Reg., 1828, died in Jamaica, 1831. At Quatre Bras he killed three Cuirassiers before he himself fell, covered with twenty-two sabre cuts.

<sup>(2)</sup> Colburn's *U.S. Magazine*, 1845, Part II., p. 292.

<sup>(3)</sup> Waterloo Letters, 1891, p. 336, and Journal of Major E. N. Macready, 30th Regiment, Colburn's *U.S. Magazine*.

<sup>(4)</sup> Records of the 24th Regiment, published 1892, p. 157; Macpherson's *Rambling Reminiscences of the Punjab Campaign*.

Chillianwallah was one of the most disastrous battles on record for British colours, for no fewer than ten standards and colours were captured or lost. The majority were lost, not captured, on account of the great difficulty the men experienced in keeping their eyes on them while going through the jungle; and for this reason the gallant 29th, now the 1st Battalion of the Worcestershire, wisely and judiciously disregarding the mere pomp and circumstance of war, advanced in more business-like fashion with their colours cased <sup>(1)</sup>. The colours of regiments and their bearers were often levelled to the earth at the same moment, their falling was apt to be unnoticed, and in this manner the majority of them were lost in the jungle. In addition to the Queen's colour of the 24th already alluded to, the 6th Bengal Light Cavalry lost their honorary standard in circumstances detailed in Part I. The 25th, 45th, and 56th Bengal N.I. lost seven colours, including an honorary one, and the 30th Bengal N.I. lost one <sup>(2)</sup>. All these native regiments mutinied in 1857 and were removed from the Army. Chillianwallah was a most severely-contested battle, and the losses on the British side were very heavy. Within the space of two hours and a half, eighty-nine British officers, and two thousand three hundred and fifty-seven fighting men, either lost their lives or were wounded.

Thirty years later the gallant old 24th lost the colours of its second Battalion, on the occasion of the never-to-be-forgotten massacre of Isandhlwana; but this misfortune, like that of Chillianwallah, far from detracting from the regiment's glorious reputation, has considerably enhanced it. The fatal 22nd January, 1879, is too well remembered to require any defence of the regiment which, "overwhelmed by countless numbers, with ammunition exhausted, fell in the ranks in which they had fought, dauntless to the last, and surrounded by the enemy's slain <sup>(3)</sup>." Five hundred and ninety non-commissioned officers and men, and twenty-one officers, were killed in action on the field of Isandhlwana and in the defence of Rorke's Drift in two days. No regiment in the British Army has a more noble history than that which, since 1867, has thirteen times won the Victoria Cross.

The last occasion upon which the colours of a British regiment have fallen into an enemy's hands was in the Afghan War of 1878-80. Though the battle of Maiwand was a humiliating disaster, the last stand of the small remnant of the 66th Regiment stands out in bold relief; and history does not reveal any grander or finer instance of gallantry and devotion to Queen and country than that displayed on the 27th July, 1880. The regiment suffered a severe loss of twelve officers, and three hundred and five non-commissioned officers and men were killed or wounded; but it was the determined stand of the last surviving group which will evoke everlasting admiration. One hundred officers and men, surrounded by the

<sup>(1)</sup> Archer's Punjab Campaign, p. 123, and Everard's History of the 29th.

<sup>(2)</sup> Ditto, pp. 57, 63, 64.

<sup>(3)</sup> Speech of Lord Napier of Magdala, on presenting new colours to the regiment, on the 6th August, 1880.

whole of the Afghan Army, fought on until only eleven men were left. These eleven men charged out of the garden and died with their faces to the foe, fighting to the death. Such was the nature of their charge and the grandeur of their bearing that, although the whole of the Ghazis were assembled around them, not one dared approach to cut them down. Thus standing in the open, back to back, firing steady and truly, every shot telling, surrounded by thousands, these eleven officers and men died; and it was not until the last man had been shot down that the Ghazis dared advance upon them <sup>(1)</sup>. The regiment lost both its colours on this occasion, but what glory surrounds the event. They were carried by Second Lieutenants H. J. O. Barr and Honywood. The former fell dead across his colour, while young Honywood, wounded early in the engagement by a bullet in the leg, managed to struggle to the garden where the last brave stand was made. On that spot, which has become sacred to the memory of the little band of heroes, who, in their determination to sell their lives dearly, watered it so copiously with their blood, he was shot down whilst holding the colour high above his head, shouting, "Men, what shall we do to save this?" <sup>(2)</sup>

No one, be he civilian or officer, can read with otherwise than honest pride of these noble deeds. Around the colours of every regiment some spirit-stirring romance is associated <sup>(3)</sup>, but at what an enormous sacrifice of human life have such deeds been purchased! Few sensible people sympathise with those utilitarian philosophers who, seeking to reduce everything to its mere hard meaning, very often miss those feelings and motives by which the heart of the soldier is stirred and moved, and, therefore, fail to realise the sentiment associated with English colours <sup>(4)</sup>. But thoughtful military men

<sup>(1)</sup> See despatch of General Primrose, 1st October, 1886. The sole survivor of this little group was a dog, which fell into the hands of the Afghans. He was subsequently recaptured however, and returned to London, only to meet his death by being run over in the streets.

<sup>(2)</sup> Shadbolt's *Afghan Campaign*, 1878-80. Vol. 1, p. 223.

<sup>(3)</sup> I have often been told that at the storming and capture of the Taku Forts on the 24th of August, 1860, a regular race ensued between us and our allies, the French, for the honour of planting the colours on the breach made by the storming party. Much gallantry was shown by officers and men of the 44th and 67th, but Ensign J. W. Chaplain, of the latter regiment, first planted his colour on the walls. It was the Queen's colour of the 67th Regiment.—R. H.

<sup>(4)</sup> An incident at the battle of Fuentes' D'onor shows the great influence of the colours of a regiment upon the men. When the 79th Highlanders were paralysed by the fall of its beloved leader, Lieut-Colonel Philip Cameron, the son of the founder of the regiment, and were pressing round the wounded clansman to give vent to their grief, Major Alexander Petrie, the next in command, seized the colours, calling out, "These are your colours, my lads; follow me." The Highlanders recovered themselves, and charging the French Grenadiers opposed to them, bore the enemy out of the contested ground at the point of the bayonet.—Ross's *Scottish Colours*, p. 106.

have paused to ask whether the results were commensurate with such sacrifice of valuable lives. The losses occasioned by the presence of colours in action have been enormous, in proof of which it is only necessary to quote from the campaigns of the present century. At Albuhera, so graphically described by Napier, the officers and sergeants fell round their colours like hail. It was the case with the Buffs, in which one colour was lost but subsequently picked up by a sergeant in the 7th Fusiliers, and in which the other was only preserved by an almost superhuman effort. Round those of the 29th many sergeants and both officers lost their lives. Similarly with the 57th, the colours of which were pierced with something like thirty bullets; while those of the 2nd Battalions of the 48th and 66th were still more unfortunate. The colours of the 7th Fusiliers were rent to rags and the staves shot to pieces, while officers and men were killed under them. At the Nive, to such an extent was the regiment reduced, that the King's colour was carried by an officer with only one arm, and the regimental colour by one with his arm in a sling from a compound fracture. At Salamanca a round shot aimed at the colours of the 11th Regiment took off the heads of the two Sergeants posted between them and that of a black bandsman in rear, but, strange to say, without injuring either of the officers carrying the colours. So many officers and sergeants fell under the colours of the 61st, that they were for some time carried by private soldiers: six reliefs of officers and men were shot under them. At Waterloo the colours of the British infantry were conspicuous targets for the French artillery and infantry, so much so that those of the 30th and 73rd were taken out of action to a place of safety. The 40th had nearly twenty sergeants killed and wounded, and the colours and staves were almost shot away. Those of the 42nd were entirely shot away and nothing but poles left. In the case of the 73rd the colours, completely riddled, were left with no officers to carry them<sup>(1)</sup>.

Indeed, all ranks appear to have had a turn at the colours at one time or another. At the action of St. Pierre, near Bayonne, in 1813, Major-General Byng, afterwards Earl of Strafford, carried a colour of the 2nd Battalion 31st Regiment and planted it on the summit of the hill<sup>(2)</sup>. The 31st was the regiment which, at Sobraon in 1846, had its colours carried by sergeants after the officers had fallen. Lieutenant Tritton, carrying the Queen's colour, was shot through the head, after which Lieutenant Noel gallantly carried it in front of the regiment and the staff was shivered in his hand. Ensign Jones, by whom the regimental colour was borne, was mortally wounded, and on its falling to the ground, Sergeant B. McCabe rushed forward and seized it. With great bravery he crossed the ditch of the ramparts and planted the colour on the highest point of the Sikh fortifications, and there maintained his position under a tremendous fire.

(1) For want of officers the colours of the 78th Highlanders were carried throughout the entire battles of Assaye and Argaum in 1803 by sergeants.—Carter's Medals of the British Army.

(2) History of the 31st Regiment, p. 208.

the colour being completely riddled with shot. Eight officers and 137 rank and file of the 31st Regiment were killed or wounded in the battle<sup>(1)</sup>. These colours, which were presented in 1827 to replace the set burned in 1825 at sea, were retired in 1848, and now hang in Canterbury Cathedral over the regimental monument.

In the first China War of 1841-2, in which the regiment earned considerable distinction, the regimental colour of the 55th, now the 2nd Battalion Border Regiment, was carried on one occasion—the capture of Chusan—by Sergeant-Major Duel, who had been recommended for promotion to Ensign, though it had not appeared in general orders; the poor fellow was killed, shot through the breast. His place was taken by Colour-Sergeant Davison, afterwards Sergeant-Major, who carried the colour—which had the spear head shot away—till the arrival of another ensign. The colours are now in the parish church of Kendal, together with three other sets belonging to the regiment, forming an unparalleled and most creditable display.

At Chillianwallah, the Sikhs directed their principal fire on the colours of regiments, and those of the 2nd Bengal European Regiment, now the 2nd Battalion Royal Munster Fusiliers, gallantly carried by Lieutenants F. V. De Mole and A. D. Toogood, were shot through and through.

The Crimean was a campaign of disastrous execution for British colours. At the Alma the 7th Fusiliers lost officers and colour-sergeants; the regimental colour was lost, but recovered by a staff officer and brought out of action by another regiment: the King's was carried by a non-commissioned officer. Those of the 20th were carried by four different officers during the day. Three officers and seventeen sergeants fell in escorting the colours of the 21st Fusiliers, which were eventually ordered out of action by Lord Raglan. Both officers of the 23rd Fusiliers were shot and the colours were carried by sergeants. The 95th Regiment retired through the Grenadier Guards, with their colours, one of which was then carried by the major of the regiment, Major Home, who, with only eight or ten of his men, came up to Colonel Hamilton, of the Grenadier Guards, saying that they were all that had held together, that they wished to continue the fight, and asked leave to fight with the Guards. They were directed to fall in on the left of the Grenadiers<sup>(2)</sup>. The 33rd had nineteen sergeants killed or wounded chiefly in defence of the colours; and similarly with the Scots Guards, though the officers carrying them bore charmed lives<sup>(3)</sup>. In the 63rd both the officers were

(1) Despatches, *London Gazette*, 1846. Sergeant McCabe was appointed Ensign 18th (Royal Irish) in 1846, and was killed, when Captain in the 32nd, at Lucknow in 1857, after displaying great bravery.

(2) Hamilton's *History of the Grenadier Guards*, Vol. 3, p. 193.

(3) It was an interesting fact that when the colours of the 55th Regiment, carried so gallantly at the Alma in 1854, were deposited with becoming ceremony in Kendal Parish Church in 1888, they were borne by Major-General Harkness and Colonel Richards; the same officers who, as Ensigns, so worthily carried them at the Alma.



killed and the colours sent out of action; and at Inkerman they were carried by sergeants for the same reason. But the climax is reached when, at the attack on the Residency at Lucknow, the colours of the 78th Highlanders were, for want of regimental officers, carried by an assistant surgeon and an officer of a native regiment <sup>(1)</sup>.

This is not the time to enter into an argument as to the value or otherwise of colours on active service under the modern conditions of European tactics, but it has been said that their presence had a very important bearing on the results of actions in the Franco-German War; indeed, upon the German infantry they appear to have exercised a powerful influence <sup>(2)</sup>. Even now, when on service, and coming under fire in close order, the colours of German regiments are uncased, the bands strike up the regimental march, and the men move forward in "paradeschritt" with the precision and steadiness of the parade ground <sup>(3)</sup>. The extreme loss of life occasioned by the effectiveness of the fire of the new artillery and infantry weapons, which compelled the gradual abandonment of close formations and the adoption of skirmishing or open-order formations, has for the present, at all events, placed a prohibition upon the presence of British colours in action.

This was laid down by an Army Circular of 2nd March, 1882:—"I have the honour, by desire of the Field-Marshal Commanding-in-Chief, to convey to you Her Majesty's command that in consequence of the altered formation of attack, and extended range of firing, regimental colours will not necessarily in future be taken with the battalion on active service <sup>(4)</sup>. When, however, a battalion proceeds abroad in the ordinary course of relief, colours will accompany the battalion, but in the event of its being ordered on active service they will be left at the base of operations unless the General Officer Commanding should be of opinion that the nature of the service in which a force is about to be engaged is such as to render the possession of the colours with the battalion undoubtedly expedient, when he may as a special matter give directions for their accompanying it. Except in this respect, no change will be made, both colours being retained as affording a record of the services of the regiment, and furnishing to the young soldiers a history of its gallant deeds. At reviews and occasions of ceremony they will be usually taken with the battalion."

<sup>(1)</sup> History of the 78th Highlanders, published by Fullarton, p. 679; these colours are now in the Town Hall, Dingwall, Ross-shire, N.B.

<sup>(2)</sup> Infantry Attack. By Captain A. R. Stuart, R.A.

<sup>(3)</sup> "Twenty years of Tactical Evolutions in Germany." Captain Maude, R.E., 1894.

<sup>(4)</sup> This circular was anticipated by some regiments in the South African and Afghan Wars. I am told that when the 85th, now 2nd Battalion Shropshire Light Infantry, left Lucknow in 1878, on the outbreak of the Afghan War, the colours were left in the custody of a native regiment. When the 7th Fusiliers and the 71st Highland L.I. and the 101st Fusiliers left the plains for the Frontier Expedition in India in 1863, their colours were handed over with due ceremony to the care of the Quarter Guard of the 51st Light Infantry.

It was on account of the peculiar nature of their drill and manœuvre that, though the 43rd and 52nd Light Infantry took their colours to the Peninsula, the three other Light Infantry regiments, the 51st, 68th, and 71st, left them in England<sup>(1)</sup>. At the end of the year 1812, when Provisional battalions were formed from the depleted infantry regiments, the colours of the 2nd Queen's and 2nd Battalion 53rd were sent home<sup>(2)</sup>. It is said that the last occasion of British colours being carried in action was at Laing's Nek in 1881, when the Queen's and the black Regimental colour of the 58th (now the 2nd Battalion Northamptonshire) were carried against the Boers; of the officers carrying them, one was killed and the other wounded<sup>(3)</sup>.

Cases have occurred of colours having been mislaid and never recovered. When the 71st Highland Light Infantry returned to England after the Peninsular War the colours were nowhere to be found, and nothing has been heard of them since. The colours carried by the 2nd Battalion Coldstream Guards at Waterloo were mislaid in a peculiar manner, and recovered thirty-four years afterwards. When the battalion embarked for England in 1816 the colours were lost amongst the baggage, and found in 1850 in a box in a lumber room in Sir Alexander Woodford's house. These were really the colours of the 1st Battalion, but had been carried by the 2nd Battalion during the campaign. And within the last fifteen years the 1st Battalion of a well-known Light Infantry regiment sent one of its colours to a firm in London to be repaired, but it never reached its destination, and was never afterwards heard of.

The accidental loss of colours in the French Army is evidently considered a crime. Such an accident recently happened to the 61st French Line Regiment. According to their regulations the C.O. has to take charge of them, and as the Colonel was a bachelor and lived in furnished apartments, he did not think it prudent to keep them at home. They were, therefore, kept in the *salle d'honneur* of the barracks, but, this hall being under repair, were temporarily removed to an adjoining room which a captain acting as major used as his office. A fire broke out in the room through some papers igniting near the fire-place, and the flag, which bore the name of Heliopolis, Wagram, Sebastopol, and Solferino, was totally destroyed. The captain was condemned by his general to thirty days' arrest, pending the decision of the War Minister<sup>(4)</sup>.

<sup>(1)</sup> Milne's Standards and Colours of the Army.

<sup>(2)</sup> Ditto.

<sup>(3)</sup> "After 1812 cavalry standards do not appear to have figured any more at the head of our squadrons in European warfare. It may be a surprise to those who take their information from the efforts of our artists to depict the crowning victory of Waterloo, and who have been so often rendered familiar with the cavalry standard waving through the battle smoke, to learn that the chivalrous guidon was conspicuous by its absence on that eventful day." Milne's Standards and Colours of the Army, an excellent book, which I have frequently quoted in this article.

<sup>(4)</sup> *L'Echo de l'Armée*. Dec., 1894.

The old 29th (now the 1st Battalion Worcestershire Regiment) possesses a curious set of colours. According to the historian of the regiment, the pair, presented in 1841 and carried through the Sutlej and Punjab campaigns, were in 1860 cut up at Aldershot and divided amongst the officers who had seen active service under them. The Colonel obtained leave to have new colours made up; this was done by the schoolmistress. They were attached to the old poles, and are still carried, though only the poles have really been consecrated <sup>(1)</sup>. In the case of the 45th (now 1st Battalion Sherwood Foresters), which still carries the colours, or rather the poles, presented in 1830, the actual silk has been more than once renewed.

It was reserved for the Indian Mutiny of 1857-58, for British, or rather native, colours to be subjected to the depth of humiliation. Until then no such degradation had befallen the colours of Her Majesty the Queen as that they should be actually fired upon by British officers and men <sup>(2)</sup>. Yet such were the necessities of the great mutiny. When the 19th Bengal Native Infantry were disbanded, the colours were returned into store, but not so with the majority of the others, for the mutineers took them with them; and such was their audacity, that they marched against us with colours flying, and the bands playing favourite English airs. The last words of Major H. E. S. Abbott, commanding the 74th Bengal Native Infantry, at the massacre at Delhi, when his men, after protecting him for some time, compelled him to fly for his life, were:—"Bring the colours to Meerut, and let me see as many of you as are not inclined to become traitors."

Some of the colours were, fortunately, re-captured. The 11th Bengal Lancers captured a set, now in their mess. Those of the 5th Oudh Irregular Infantry, carried by a native officer, were captured at Lucknow, on 25th September, 1857, by the 5th Fusiliers. A portion of the regimental colour of the 14th Native Infantry was taken from a sepoy of the regiment by Captain H. Scott, 9th Lancers, at Lucknow. It was carried by the rebel regiment for nearly a year, and when re-taken nearly the entire regiment had been destroyed; on one day 850 men are said to have been buried. The colour, or what remained of it, was sold at Sotheby's in November last for seventeen guineas! The regimental colour of the 41st Native Infantry was captured by the 61st Regiment at the taking of the Delhi Magazine, on 16th September, 1857. The regimental colour of the 52nd N.I. was captured at Rampore-Russia, in November, 1858, by a lance-daffadar of the 1st Punjab Cavalry; and the present Lord Roberts, General Sir J. A. Ewart, and General Sir Dighton Probyn each captured a rebel standard or colour. Private P. Bray, of the 20th (now the Lancashire Fusiliers), swam across the Ganges in the action of 24th November, 1858, in pursuit of a Sepoy carrying the Queen's colour

<sup>(1)</sup> Everard's History of the 29th Foot, p. 425.

<sup>(2)</sup> Whether the colours of the regiments which mutinied in 1764, 1796 at Vellore, and in 1824 at Barrackpore, were fired upon I cannot say.—R. H.

of the 54th Bengal N.I., and eventually succeeded in capturing it after a desperate struggle in which he was severely wounded. The colour is now in the mess of the 1st Battalion Lancashire Fusiliers.

Not far removed from the above discreditable circumstances is the degradation to which some most distinguished colours have descended, from the very common practice of presenting them when worn out to a respected commanding officer or honorary colonel, to be hung up in some hall or private room. They doubtless have been religiously preserved during the lifetime of the recipients, but there is, unfortunately, sufficient evidence to show that after their death these consecrated banners are not infrequently subjected to all kinds of unintentional humiliation.

On the evening of 10th March, 1863, a beautiful regimental colour, with its staff, spear head, and tassel cords complete, was seen flying from the windows of a shop in St. Martin-in-the-Fields, flapping about amid the smut and soil of smoky gas as if it had been a mere piece of, comparatively speaking, worthless bunting. The colour was of date before the Union with Ireland, and bore the Prince of Wales's feather under a crown, in the centre of St. George's Cross, and now was subjected to all the filth and peril of exposure as the mere spectacle of an illumination night, and lost, except to curious eyes, among the spread of bunting that half smothered it <sup>(1)</sup>. In 1785 the colours of the 39th Regiment, presented in 1759, and carried during the great siege of Gibraltar, were presented to Major-General Sir Robert Boyd, K.B., Colonel of the regiment and Lieut-Governor of the island. Over one hundred years afterwards the regimental colour, after undergoing various vicissitudes, was purchased almost in rags from a small shopkeeper, who had cut it up to adorn the cushions in his sitting-room. Luckily it fell into good hands; it was carefully put together and mounted upon a piece of willow-green silk, and will be properly looked after. The same gentleman who purchased it is also the proud possessor of one of the colours of the 2nd Battalion Coldstream Guards and the King's colour of the 2nd Battalion of the 1st Foot Guards of George the 2nd's time, both obtained under very peculiar circumstances. Captain Clark-Kennedy <sup>(2)</sup>, late of the Coldstream Guards, of 19, Eccleston Square, S.W., has one of the Coldstream Guards', which he purchased at an old shop in London; and within the last two months the King's colour of the 2nd Battalion Coldstream Guards, of about the period 1816-25, was found at the Herald's College. When the 96th were at Aldershot in 1879, the Commanding Officer received by post the colours of a former regiment bearing the same number. They belonged to the 96th, raised and commanded in 1780 by Lieut-Colonel Richard Whyte, of the 3rd K.O. Dragoons, and disbanded in 1783. When

<sup>(1)</sup> *Notes and Queries*, 3rd Series, Vol. III., p. 229.

<sup>(2)</sup> Captain Alexander W. Clark-Kennedy, of Knockgrav, died in December last.

this officer—afterwards Lieut-General, and Colonel of the 24th—died in 1807, he left some linen to his servant, and in this linen many years afterwards were discovered the colours, which this servant's descendant very properly sent to the 96th, and they now hang in the Officers' Mess of the regiment, the 2nd Battalion Manchester. About six years ago two sets of colours carried by the 28th Regiment from about 1795 to 1810, probably in Minorca, the Egyptian Campaign of 1801, where it earned the distinction of wearing the number at the back as well as front of the cap, and in the Peninsula, were purchased in a shop in York. These two pairs of old colours were the property of the late General Prescott, who was full Colonel of the 28th from 1789 to 1815. On his decease in 1815 they were bequeathed to his son, and in course of time came into the possession of a valet, who, unaware of their value and antiquity, sold them to a pawnbroker in York. There they were found in February, 1886, by Colonel C. B. Knowles, A.A. and Q.M. General of the district, who informed the officers of the regiment, then stationed at York, of the discovery. After some negotiation they again became the property of the corps, were properly mounted, and took their places in the officers' mess at the end of March, 1886.

Some years ago the centre part of the King's colour of the 48th Regiment, carried probably at Badajos, Salamanca, Vittoria, the Pyrenees, the Nivelle, at Orthes, and Toulouse, was also discovered in a pawnshop. It is again, fortunately, in possession of the regiment. A fine pair of colours of the 55th Westmoreland Regiment, now the 2nd Border Regiment, were purchased from an upholsterer who had advertised them for sale—in 1888, by Lord Archibald Campbell. They were probably carried by the regiment from about 1785 to 1801; and, on the presentation of new colours on 4th June, 1801, after the Union, were handed over to the Colonel of the regiment, Lieut-General Loftus A. Tottenham, who died in 1811. Lord Archibald Campbell very kindly and very properly presented them to the regiment, and they were deposited with great ceremony in the Parish Church of Kendal, Westmoreland, on 27th October, 1888, alongside three other sets of the same distinguished regiment<sup>(1)</sup>. In Hawkes's, the Army outfitters of Piccadilly, may be seen the colours of the 2nd Battalion of the 20th Regiment<sup>(2)</sup>. They were made about the year 1800, but only carried for a short time, as the Battalion was disbanded in 1802. This firm has carefully preserved them under a glass case, and they are in perfect condition; but a shop is not the place for regimental colours. If the regiment cannot legally claim them, it would be a very proper act on the part of Messrs. Hawkes, a firm extensively patronised by officers of the Army, to present them either

(<sup>1</sup>) Lord Archibald Campbell tells me he telegraphed to have the colours sent to Coutts' Bank immediately on seeing the advertisement. He is certainly entitled to the thanks of the Army for his patriotic act in restoring them to the regiment.

(<sup>2</sup>) An illustration of the regimental colour is given in Milne's *Standards and Colours of the Army*, p. 129.

to the Parish Church of Bury, the headquarters of the regimental district, or to some national institution, such as the Royal United Service at Whitehall. At either of these places they would receive the respect to which they are entitled.

In no other country but Great Britain would such acts of vandalism be tolerated. It is difficult to take action in the case of very old colours which were the private property of the commanding officer and not issued by Government; but it is not too late for the War Office to issue stringent regulations with regard to the disposal of regimental colours retired from use. In no circumstances should they ever be handed over to private individuals. Their proper place is either the Parish Church <sup>(1)</sup>, or local Cathedral <sup>(2)</sup>, the Tower of London, the Royal United Service Institution, or with members of the Royal Family. The War Office authorities might follow the example of the Royal Marine Office and call for a return from every regiment in the Service, which carries colours, to explain and place upon official record the fate of all their sets, so far as they are in a position to afford it <sup>(3)</sup>. The office of Inspector of

<sup>(1)</sup> It is necessary, however, to point out that even when colours have been presented to churches they have frequently been subsequently mislaid and lost, and the only way to prevent this in future seems to be to insert a brass plate or tablet under the colours explaining their history. Shortly after the 56th Regiment returned from India in 1866, it was presented with a new set of colours, the retired pair being on the same occasion deposited in a certain church in Essex. Not long afterwards, a subaltern of the regiment, happening to visit the Vicar's house, was astonished to find one of the daughter's blotting-books decorated on the outside with the castle of Gibraltar, surmounted with the motto "Montis Insignia Calpe" on a purple ground. It was portion of the regimental colour of the 56th, which he himself, along with an escort of the regiment, had a short time previous entrusted to the sacred care of the Vicar, and seen deposited in the Church.—R.H.

<sup>(2)</sup> On the 66th leaving St. Vincent in the West Indies in 1793, the regiment, at the special request of the Local Government, presented its old colours to the Colony on the 8th January, 1793, and they were deposited in the Court House at Kingstown.

<sup>(3)</sup> Amongst colours known to be in private hands are complete sets of the following regiments:—

- 1st Royal Scots. Three complete sets and one other regimental colour, 1790-1825; Duke of Richmond and Gordon, Gordon Castle, Banffshire, N.B.
- 20th East Devonshire. 1800-2, 2nd Battalion; Hawkes & Co., Tailors, Piccadilly, W.
- 25th K.O. Borderers. 1805-15; Colonel J. Gildea, 4th Battalion Royal Warwickshire Regiment, 7, Knaresborough Place, S.W.
- 29th Worcestershire. 1824-1841; Earl of Stafford, Wrotham Park, near Barnet.
- 30th Cambridgeshire. About 1835; Captain T. B. Atkinson, Grenadier Guards, Angerton, near Morpeth, Northumberland.
- 32nd Light Infantry. About 1820; Mrs. Cameron-Campbell, of Monzie, Inverawe House, Argyllshire, N.B.
- 33rd West Riding. 1770-1787; Colonel C. K. Kemeys-Tynte, Cefn Mabley, Cardiff.

Regimental colours should be held by a military man interested in service matters, whose duty it should be to regulate every detail connected with the consecrated flags of British regiments. Until the appointment of Mr. Fleetwood-Wilson, C.B., as Director of Clothing, it had been customary in the department, in the event of colours made for a regiment

- 40th, 2nd Somersetshire. 1799-1802, 2nd Battalion; Sir Algernon K. B. Osborn, Bart., 3rd Battalion Bedfordshire Regiment, Chicksand Priory, Bedfordshire.
- 42nd Highlanders. 1785-1803; Mrs. Munro-Ferguson, Novar House, near Inverness, N.B.
- .. 2nd Battalion. 1779-1786; Macleod of Macleod, Dunvegan Castle, Skye, N.B.
- .. 1802-1812; Duke of Richmond and Gordon, Gordon Castle, Banffshire, N.B.
- .. About 1803-14, 2nd Battalion; Duke of Richmond and Gordon, Gordon Castle, Banffshire, N.B.
- .. 1861-1871; Late General Sir Duncan A. Cameron, G.C.B.
- 53rd Shropshire. 1770-1780; Sir G. H. Dalrymple-Horn-Elphinstone, Bart., Logie Elphinstone, Aberdeenshire, N.B.
- 57th (West Middlesex). Peninsula colours used till 1813; Captain W. R. Inglis, Adjutant 4th Battalion Norfolk Regiment, Norwich.
- .. 1813-1824; Captain A. D. Fanshawe, R.N., A.D.C., 23, Charles Street, Berkeley Square, W.
- .. 1804-1815, 2nd Battalion; Captain A. D. Fanshawe, R.N., A.D.C., 23, Charles Street, Berkeley Square, W.
- 72nd Highlanders. 1842-1857; Mackenzie of Seaforth, Brahan Castle, Ross-shire, N.B.
- 73rd Regiment. 1807-1825; Captain O'Connell, late 73rd Foot, Guildford.
- .. Another set; Macleod of Macleod, Dunvegan Castle, Skye, N.B.
- 78th Highlanders. 1793-1804; Mrs. Wardlaw, Belmaduthy, Ross-shire, N.B.
- .. 1794-6, 2nd Battalion; Mackenzie of Seaforth, Brahan Castle, Ross-shire, N.B.
- .. 1804-17, 2nd Battalion; Captain Norman MacLeod, Dalvey, Forres, N.B.
- 79th Highlanders. 1804-28; Lady Douglas, Glenfinart, Greenock, N.B.
- 81st Foot. 1790-1800; Colonel T. Cadell, V.C., 11, Sydney Place, S.W.
- 91st Highlanders. 1828-1845; Gordon of Ellon Castle, Aberdeenshire, N.B.
- 92nd Highlanders. 1794-1807; Duke of Richmond and Gordon, Gordon Castle, Banffshire, N.B.
- .. 1803-1814, 2nd Battalion; Earl of Hopetoun, Hopetoun House, Linlithgowshire, N.B.
- 93rd Highlanders. 1857-1871; Duke of Sutherland, Dunrobin Castle, Sutherland, N.B.
- Scots Brigade (afterwards 94th). 1793-1802; Mrs. Ferrier, Belsyde, Linlithgowshire, N.B.
- 97th (Inverness) Regiment. 1794-1795; Countess of Seafeld, Castle Grant, Grantown, N.B.
- 97th (Queen's German's). About 1810; afterwards 96th Foot, disbanded 1818; Colonel J. Gildea, 4th Battalion Royal Warwickshire Regiment, 7, Knaresborough Place, S.W.
- 103rd. 1781-1783; Hon. John Abercromby, Athenæum Club, S.W.
- 4th West India Regiment. 1795-1802; Major-General O. H. A. Nicolls, R.A.
- De Roll's Regiment. 1810-1816; Colonel J. Gildea, 4th Battalion Royal Warwickshire Regiment, 7, Knaresborough Place, S.W.

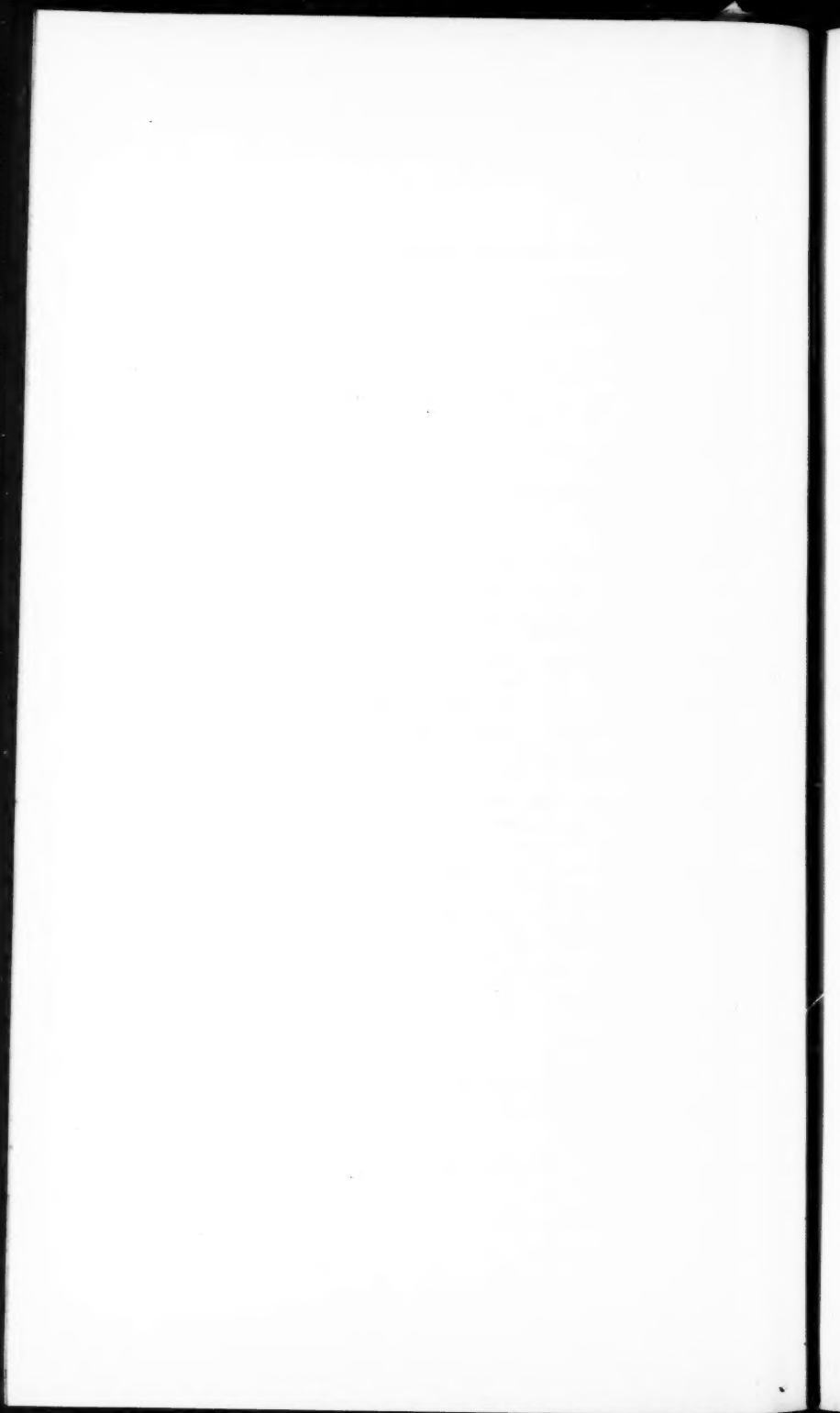
Odd colours or portions of colours of the following regiments are known to be in private hands:—Grenadier Guards, Coldstream Guards, 3rd Foot Guards, 39th, 51st, 67th, 78th, 93rd, and 103rd (Volunteer Hunters).



not being approved, to sell them by auction, like the condemned clothing of the Army; and there was nothing to prevent the Salvation Army or a mob of socialists purchasing them and carrying them in procession through the streets!

It also appears that there is nothing to hinder the firm which has the contract from making colours for the Army from supplying those of any regiment to the order of a private individual. Such a case did occur, in which a regimental colour of a most distinguished regiment was made to the order of a private individual, with the number and honours duly inscribed upon it, and pole and surmount of crown and lion complete. It found its way into the market, changed hands once or twice, and it took all the experts in England to decide that it was not the actual one carried by the regiment on a celebrated occasion. Fortunately, it is now in safe hands. Perhaps the authorities, in view of these contingencies, might consider the advisability of including a proviso in the contract forbidding the making of colours to any order except that of the Government.

Officers of the British Army take great pride in anything of historical interest connected with their regiments, and colours very properly claim their first attention. Much has been done in recent years to attract attention to these national relics, which are bound up so closely with every regiment's history. Some of them, tattered and in rags as they may be, recall to us the fighting days of Wellington's army in the Peninsula, and help us to perpetuate the memory of the British soldiers, to whose bravery Napier, with his command of heroic language, declared himself unable to do justice. Others are associated with the earlier campaigns in India, and the more recent wars of the Punjab, the Sutlej, the Crimea, and the Indian Mutiny. Perhaps it is not too much to hope that before long all the colours now in private hands may find their way either to the local cathedrals and churches, or to some great national institution, where soldiers of all ranks and the British public may be given the opportunity of familiarising themselves with them. During their period of active servitude these various flags have been held sacred by the soldiers who served under them; and now, tattered and worn, after years of honourable service, they appeal forcibly to all Englishmen, and are of national public interest.



## THE NATIONAL FLAG.

*By Rear-Admiral R. BLOMFIELD.*

“**T**HOUGH not expressly mentioned,” says Sir H. Nicolas, in his “History of the Royal Navy,” “it may be safely inferred that the Banner of St. George, a narrow white flag with a red cross, under which so many glorious victories have been gained, and which is still the representative of England in the national flag, was first introduced by King Richard I.; and, as it is certain that the armorial ensigns of this country, ‘Gules, three lions passant, gardant, or,’ were adopted by him, a banner with the lions and another with the red cross no doubt floated from his galleys.”

I wish I could concur with the distinguished naval archæologist in this belief; but, not having succeeded in finding any confirmatory evidence as to earlier date, and much as to the flag having originated more than half-a-century later, I prefer to adopt the following view.

As we are indebted to Richard Cœur-de-Lion and the third Crusade for our first historical Admiralty badge, so we are, in all probability, to the last of the Crusading Princes, his great-nephew, Edward Longshanks, for our national colours; and as the gallant sea-fight, which has made us ever look up to Richard I. as our greatest naval hero in a foreign sea, took place in the vicinity of the Phœniceo-Syrian city of Beyrut, so is it from the neighbourhood of the same locality that our national emblem and patron saint, Saint George and the Dragon, appears to have reached us by the hand of his descendant.

All the world knows that the Crusaders were so called from the various crosses which the warrior pilgrims bore on some part of their attire to indicate their nationality and the holy cause to which they had devoted themselves. The knights wore a surcoat over their armour, which was a long loose flowing robe charged on the shoulder or breast or back with the cross of the Order to which they belonged. At the time of Prince Edward's departure from Portsmouth with his fleet, at the age of thirty-two, in August, 1270 A.D., the two great military orders for the defence of Palestine, established in England since the year 1100 A.D., were the Knights Templars and the Knights of St. John of Jerusalem, bitter enemies to one another. The badge of the former was a white surcoat having a red Maltese cross on the left shoulder, and of the latter a black habit with a white Maltese cross in front.

The choice as regards aid in the enrolment of his followers by Edward would probably lie between these two, and, as he had a few years before made enemies of the Templars by breaking open the Temple Treasury and abstracting from it £10,000, he would not be

likely to seek their patronage and support. Moreover, only eleven years before, in one of their furious struggles in Palestine, the Knights of St. John had well-nigh exterminated the Templars.

The Prince, after calling at Tunis and Sicily, visited Cyprus, like his uncle, and landed at Acre with 1,000 soldiers on 20th April, 1271, remaining for about eighteen months in the Holy Land before eventually returning home *via* Sicily in 1274. It is remarkable that between the years 1278 and 1289 the Knights of St. John, when engaged in military duties, changed their black dress for a red surcoat and placed upon it a white straight cross instead of the former eight-pointed or Maltese one. This is precisely the period at which the St. George's cross appears to have been introduced into English banners, and this form of the cross in the banner seems to be that used on the summit of the beautiful erections at Cheapside and other places *en route* from Lincoln to Westminster Abbey, raised in 1294 by Edward I. to mark the spots at which the corpse of his beloved Queen Eleanor had rested on its way.

At the time of Longshank's visit to Palestine, Beyrut had been in the hands of the Christian Crusader Princes since 1197 A.D., and three miles north of the town, along the seashore, stood, and still stands, the ancient grotto of St. George, cut into the rock, and famous as the traditional spot where St. George killed the dragon which was about to devour the King of Beyrut's daughter. Bishop Pococke (1740 A.D.) tells us that, in the Middle Ages, this spot, which is still the object of a pilgrimage, was called Cappadocia, and Gibbon, in his "Decline and Fall," says that our patron saint is Saint George of Cappadocia. The veritable martyr saint is said to have been born in Armorica and beheaded in the reign of Diocletian, April 23, 303 A.D. It is not unlikely that during the year he spent in Palestine Prince Edward had his interest excited by a visit to this spot and by its traditions, and that, when, as I assume, he invented the national banner after his return to England in 1274 A.D. (having already been two years king), he revived the British Arthurian legend of St. George and the Dragon, and adopted the latter as the national emblem in conjunction with the flag.

All that we know for certain as regards the latter is that, in the Roll of Caarlaverock, 1300 A.D., we have the first mention of the Banner of St. George, and in the "Sigillum commune de Lim," or seal of Lyme Regis (of which there is an excellent engraving in the history of Sir H. Nicolas, who pronounces it to be between the date of Edward the First's marriage with Eleanor of Castile on 19th August, 1274, and her death on 28th November, 1291) we have the present St. George's banner on the shield of the knight, who is represented in the act of slaying the dragon. This seal, moreover, bears the Admiralty badge of Richard I., the star and crescent, which perhaps led Sir H. Nicolas to attribute the origin of St. George's banner to that king.

Our national flag is, therefore, at least as old as the reign of Edward I., and its association with St. George and the Dragon is not more recent. At Elsyne, Norfolk, is a fine sepulchral brass to Sir Hugh Hastings, 1347 A.D. (said to have been at the siege of Caarlaverock), in

which St. George appears mounted and transfixing the dragon, and his cross is on the surcoat of the knight.

Prior to the invention of St. George's flag all Royal vessels of war had carried the Royal standard, which, after the adoption of the title of "Admiral of the Sea of the King of England," conferred for the first time on William de Leybourne, July 18th, 1296, was reserved to the Lord Admirals. On the great seal of the first Lord Admiral, Sir Thomas Beaufort, Earl of Dorset, and Duke of Exeter, grandson of Edward III., and created "Admiral of England, Ireland, Aquitaine, and Picardy" in 1409 (11th Henry IV.), is depicted an ancient one-masted galley with top-garland and a single square sail, set on the mast, on which are the family arms of the duke which were also the Royal arms of that day. At the stern of the ship is the Royal banner, and at the bow a staff bearing the rectangular St. George's flag as always worn until the accession of James I.

Although on May 19th, 1603, the union of the crowns of England and Scotland had been proclaimed, and, on October 24th, 1604, James I. was proclaimed King of Great Britain as well as of France and Ireland, and was desirous of using this style "as well in all Legal Acts and Proceedings as in Acts of State and other indifferent acts," on reference to the judges "they answered, *una voce*, that it could not be done, and Lords and Commons were likewise of the same judgment" (being asked their opinion in the first Parliament held in King James's reign); and this view as to the style "King of Great Britain" was confirmed in the first year of Charles I., who also wished to assume that title.

No change took place in the old national flag, "a Greek cross, gules on a field argent," until three years after the accession of James I., when the following "Proclamation declaring what flags South and North Britain shall bear at Sea" was issued:—

"Whereas some difference has arisen between our Subjects of South and North Britain travelling by sea, about the bearing of their flags; for the avoyding of all such contentions hereafter, We have, with the advice of our Council, ordered that, from henceforth, all our Subjects of this Isle and Kingdom of Great Britain, and the members thereof, shall bear in their maintop the Red Cross commonly called St. George's Cross, and the White Cross commonly called St. Andrew's Cross, joyned together according to a form made by Our Heralds and sent by Us to Our Admiral to be published to Our said subjects. And in their Foretop Our Subjects of South Britain the Red Cross only, as they were wont; and our Subjects of North Britain in their Foretop the White Cross only, as they were accustomed; Wherefore We will and command all Our Subjects to be conformable and obedient to this Our Order, and that, from henceforth, they do not use to bear their flags in any other sort, as they will answer the contrary at their Peril. Given at Our Palace of Westminster the 12th day of April in the 4th year of Our Reign of Great Britain, France and Ireland. Anno Domini 1606."

The Royal Proclamation at Greenwich for the Union of England and Scotland is dated May 19, 1603, and the King had, already, in

the same month sent instructions to Lord Admiral, the Earl of Nottingham, to be given to the Navy Board as to "how Our Armes are to be borne in flagges at Sea," which, of course, related to the Lord Admiral's own flag, the Royal Standard, and no change in the old national flag of St. George seems to have been considered necessary for the first three years of King James's reign, during which the English and Scotch ships both continued to wear the Red and White Crosses respectively as before his accession.

The Proclamation of 1606, authorising merchant vessels to wear the new national flag at the *main* was the cause of much trouble to the Admiral of the Narrow Seas, as I shall show hereafter, and the privilege of wearing it at any masthead by a merchant vessel, or indeed at all, was withdrawn twenty-eight years later. Sir William Monson, writing some years after the withdrawal of the privilege, and at a time when the use of the new national flag was entirely confined to ships of war, still ventures to express his disapproval of the invention of the combined crosses. He says, "All Admirals in the King's Service were wont to carry, antiently, the St. George's flag to the head of the topmast; but, since King James's coming to possess this Crown, he has added to it the Cross of St. Andrew as due to Scotland, which, though it be more honour to both the Kingdoms to be thus linked and united together, yet, in the view of the spectators, it makes not so fair a show, if it would please His Majesty<sup>(1)</sup> to consider it."

The popular names for the English and Scotch national flags at the accession of James I. were respectively "St. George's Cross" and "St. Andrew's Cross," the former being a red Greek cross on a white field, and the latter a white diagonal cross on a blue field—heraldically, "a saltire argent on a field azure." The expressions used in the Proclamation of 1606 "the Red Cross, commonly called St. George's Cross," and "the White Cross, commonly called St. Andrew's Cross," seem to have misled some writers on the subject of flags to suppose that the task proposed to the heralds by the king for execution was simply to unite a white and a red cross together, whereas there never was such a thing as a St. George's or a St. Andrew's Cross apart from the banner or flag. What the heralds had to do, therefore, was to join together the two *flags*, which they did by placing the St. George's Cross over the St. Andrew's, and then removed from the former only so much of the white field as should leave the "white saltire on a field azure" clearly indicated beneath, leaving sufficient white as a border to the red cross to indicate clearly the "cross gules on a field argent." The width of this white border, in order to prevent the possibility of its being eventually minimised and the true St. George's Cross thus reduced to a simple red one, was directed to be never less than one-third the width of the cross.

In the verbal blazoning of the new flag of 1606—the Union—this border is called a "fimbriation," a term *usually* applied to a narrow border added to a tincture when placed upon another, in heraldry, to

(1) N.B.—Charles I.

give it a more pleasing effect, which meaning is clearly not applicable in the present case; but the term "fimbriation" so far misled the writer of a book on flags, published in 1881, as to cause him to think the error was not in the misapplication or misapprehension of the term "fimbriation," but in the width of the border to the cross in the flag, and he succeeded, he tells us, in inducing the Admiralty of that day to ask Sir Albert Woods, Garter King at Arms, *to have the flag altered to suit the verbal blazoning* instead of the blazoning to suit the flag, and was evidently quite indignant that his view of the matter was not accepted.

No change took place in the new national flag until the 5th May, 1634 (10th Charles I.), when a Royal Proclamation was issued confining the use of the Union flag entirely to ships in His Majesty's service, and limiting English and Scotch merchant vessels to the use of the St. George's and St. Andrew's Crosses only, as had been the case before the Proclamation of 1606.

The change came about in the following way:—The national flag (St. George's Cross) at the main had, prior to 1606, always been peculiar to the Admiral in command of the Narrow Seas, a post filled from the time of Henry VIII. to the accession of James I. by the Controller of the Navy, whose limits of jurisdiction were fixed between Cape Finisterre and Staten Island in Norway; and no merchant vessel whatever, nor even a man-of-war, unless carrying the Vice- or Rear-Admiral of the same fleet, was allowed to wear this flag in his presence at any masthead.

The Proclamation of 1606, authorising all merchant vessels, whether Scotch or English, to bear, equally with men-of-war, the new national flag (Union) at the main, as well as the St. George's or St. Andrew's Cross at the fore, was a great blow to the prestige of the Narrow Seas Admiral, and it is surprising that the Earl of Nottingham, who had been one of the Commissioners for the Treaty of Union, should have sanctioned it; as, although no merchant vessel could fly the Union or any other flag at the masthead in the presence of his own (the Royal Standard) still, there would, in his absence, now be numerous Unions at the main in the Channel, and how were foreign men-of-war to distinguish a merchant vessel from the Admiral in command of the Narrow Seas?

Sir William Monson was Admiral of the Narrow Seas between 1604 and 1616 A.D., during which time no foreign man-of-war or merchant vessel was allowed to fly a flag in his presence; but, although he was engaged in frequent squabbles with the Dutch in enforcing this ancient homage, no question regarding the flags carried by British merchant vessels seems to have arisen. The fact was, however, that during this period our merchant navy had so dwindled that, according to Monson, in 1615 the Port of London did not possess 10 vessels of above 200 tons.

Monson was succeeded by his son-in-law, Sir Francis Howard, as Admiral of the Narrow Seas, who continued to hold this post until his death, being succeeded by Sir Henry Mervyn, and he by Sir John Pennington, in April, 1633; but, in the interim, the merchant navy had



so increased, that in 1622 the small port of Newcastle alone had upwards of 100 ships of over 200 tons burthen, and a great number of merchant vessels were employed in the expeditions of Sir Robert Mansell, Vice-Admiral of England, to Algiers, in 1620; of Lord Wimbledon to Cadiz in 1625; Lord Willoughby d'Eresby in 1626; and of the Duke of Buckingham to Rochelle in 1627, and of Lord Lindsey in 1628 to the same place.

By the year 1634 the number of merchant vessels in the Channel flying the Union at the main had increased to such an extent that the Admiral of the Narrow Seas—at that time Sir John Pennington, who had been appointed to that post in April, 1633, with his flag on board the "Unicorne"—made an appeal to the King on the subject, in which he complained of "the late neglect of His Majestie's owne subjectes in passing by the shippes employed for guard of the Narrow Seas, not only without speakinge, but even presumptuously wearing theire flagge at the topmast head untill forced to take it in."

On 7th April, 1634, Sir John wrote a strong letter to the Board of Admiralty, enclosing a number of queries, to which, to use his own words, "I insist on having a positive or negative answer in my instruccions, that I may govern my açcons soe as that they may be free from question hereafter."

The first of these queries was: "That if any straunger rydes in any of H.M. Harbours or Bayes with counterfeit collours, and not the collours of his nation, whether I shall not apprehend him as a pyratte," which, having been referred to Sir Henry Martin, Judge of the High Court of Admiralty, the latter gave his opinion in the affirmative.

The last query was: "For altering the coullers whereby His Majestie's owne ships may bee knowne from the subjectes, I leave to your Lordshippes more deep consideraçon; but, under correction, I consider itt to bee very materiall, and much for His Majestie's honour; and, besides, will free dispute with straungers; for, when they omitt doing theyr respectes to His Maties shippes till they be shott att, they alledge they did not know itt to bee y<sup>e</sup> King's shippe."

As regards the view of Sir Henry Martin upon the first query, the Lords of the Admiralty thought it rather too strong, and did not insert any paragraph into Sir John Pennington's instructions; but in those issued to his successor, the Earl of Lindsey, in the next year is the following: "If your Lordshipp shall meete with any straungers' shippes (men-of-warre) ryding in any of H.M. roads, bays, or harbours, with counterfeit collours, w<sup>h</sup> is a practice of late much used to entrapp such florenegers as trade on H.M. coastes, you are to cause them to be apprehended by some of your flecte and brought safe into some of H.M. portes, to answer such their presumption and offence according to lawe"; and this order has continued, from that day to this, to retain its place in the various editions of the Admiralty Instructions.

The second query having been referred to Charles I., was responded to by the following Royal Proclamation, dated 5th May, 1634:—

"By the King.

"A Proclamation appointing the flags, as well for Our Navie Royall as for the ships of Our subjects of South and North Britaine.

"We, taking into our Royal consideration that it is meete for the honour of Our own shippes in Our Navie Royall, and of such other shippes as are or shal be employed in Our immediate service, that the same bee, by their flags, distinguished from the shippes of any other of Our subjects, doe herebye straitly prohibite and forbid that none of Our subjects of any Our Nations and Kingdoms shall, from hencefoorth presume to carry the Union Flagge in the maintoppe or other part of any of their ships, that is the St. George's Crosse and St. Andrew's Crosse joyn'd together, upon pain of Our high displeasure; but that the same Union Flagge bee still reserved as an ornament proper for Our owne ships, and ships in Our immediate service and pay, and none other. And likewise Our further will and pleasure is that all the other ships of Our subjectes of England, or Southe Britaine, bearing flags, shall from hencefoorth carry the Red Crosse commonly called St. George his Crosse, as of olde time hath been used; and also that all the other shippes of Our subjects of Scotland or North Britaine shall from hencefoorth carry the White Crosse commonly called St. Andrew's Crosse. Whereby the several shippes may bee distinguished, and Wee thereby better discern the number and goodness of the same; wherefore Wee will, and straitly command all Our subjectes forthwith to bee conformabel and obedient to this Our order, as they will answer the contrary at their perills.

"Given at Our Court at Greenwich, this 5th day of May in the tenth yeare of Our reigne of England, Scotland, France, and Ireland. Defender of the Faith, &c.

"God Save the King.

"Imprinted at London by Robert Barker, Printer to the King's Most Excellent Majestie, and by the assignes of John Bill, 1634."

There were thus established on the 5th May, 1634, for the first time in history, three national flags, namely: the supreme one—the British flag or Union—reserved exclusively for use by the Royal Navy; the St. George's Cross or old English flag for South British or English merchant vessels; and the St. Andrew's Cross or old Scotch flag for North British or Scotch merchant ships; after the fashion of Norway and Sweden in the present day, but with the addition of the Union or combined national flag, in which that kingdom is wanting. This mode of wearing national flags afloat remained in force until the execution of Charles I., on the 30th January, 1649. The death of the King and the refusal of Parliament to admit the right of his heir to take his place on the throne as the hereditary Sovereign of both nations, as well as the abolition of the kingly office, dissolved the connection with Scotland; and, although no change was necessary in the national Scotch and English mercantile marine flags as then worn, the Royal, or, as they were now styled, the "State's" ships, were ordered to revert to the use of the St. George's Cross, and to carry the same flag as English merchant vessels.

The following letter, dated 23rd February, 1648, from the Council of State to the Navy Commissioners, who were the State's substitute for the Navy Board instituted by Henry VIII., indicates the change of flag. All men-of-war at this time carried on the stern a carved design of the Royal Arms.

"Gentlemen,

"There hath bene a report made to the Counsell by Sir Henry Mildmay of your desire to be informed what is to be borne in the Flagges of those shippes that are in the service of the State, and what to be upon the stern in lieu of the armes formerly there engraven; upon the consideration of which the Counsell have resolved that they shall beare the Red Crosse only in a white flag quite through the flagg; and that upon the sterne of the shippes there shall be the Red Cross in one escutcheon and the harpe in another, being the armes of England and Ireland; both escutcheons joyned together according to the patterne herewith sent you; and you are to take care that these flaggs may be provided with all expedition for the shippes for the Summer Guard, and that those engravings may also be altered according to this direction with all possible expedition, w<sup>h</sup> wee recommend to your care & expect certificate of your proceeding herein.

"Signed in y<sup>e</sup> name of y<sup>e</sup> Counsell of State,

"JOHN BRADSHAW.

"Derby House, 23 February, 1648."

The Order of the Council of State, as will be seen, only affected the flags of men-of-war, merchant vessels being allowed to carry their St. George's and St. Andrew's Crosses as before. The Colonel-Admirals Popham, Blake, and Deane were ordered that in case they met *Scotch ships* bearing either the Red Cross or the King's arms they were "to admonish them not to do it in future." Their orders, too, as regards the homage to be paid to the old national flag in the Narrow Seas were even more stringent than in Royal days, and run as follows:—

"And whereas the dominion of these seas has, time out of mind, undoubtedly belonged to this nation, and the ships of all other nations, in acknowledgment of that dominion, have used to take down their flags upon sight of the Admiral of England, and not to bear it in his presence, you are as much as in you lies to endeavour to preserve the dominion of the sea, and to cause the ships of all other nations to strike their flags and not to bear them up in your presence, and to compel such as are refractory therein by seizing their ships and sending them to be punished according to the Laws of the Sea unless they yield obedience and make such repair as you approve."

The St. George's Cross continued to be the national flag throughout the period of the interregnum; but an important change was made in the beginning of the year 1653 by its insertion, next the staff, into the upper canton, of large rectangular red, white, and blue flags, carried at the

stem or on the mizzen yard, introduced for the purpose of more readily distinguishing the division of a fleet to which a State's ship might belong. These flags were called "ensigns," a term which by that time had come to be applied exclusively to the national flag when borne at the stern of a ship, although formerly, and even so late as 1635, it was often used as a synonym for a banner or any rectangular flag of certain dimensions, as, for instance, the Earl of Lindsey, in his instructions to his fleet, dated 30th May, 1635, says: "When you see the British flag spread upon the mizzen shrouds, then the council is to come aboard me; if the *Red ancient* (<sup>1</sup>), then both captains and masters." In the Duke of York's instructions to the fleet in 1672 he used precisely the same words, except that "flag" was substituted for "ancient." The use of the words "red ancient" have led some to suppose that the modern red ensign was implied, but this is an error; nor is it the case, as has been also imagined, that the red, white, and blue ensigns were used in the Royal Navy by the Duke of Buckingham's fleet in 1627, or ever before, as already stated, 1653 A.D.

As all three ensigns have always been tactical and departmental as regards the navy, and as the red ensign, appropriated to the use of merchant vessels since the Revolution of 1688, is only an embodiment of, and not a modification of, the national flag, I must reserve an account of their origin and development to another paper, but I may mention that the present pendant carried at the main top-gallant masthead of every man-of-war was also first introduced in 1653, having been previously carried at the yard-arm.

The Union was tacitly restored as the national flag on the day of King Charles the Second's embarkation from Schevening on the 22nd May, 1660, and its use afloat reserved exclusively to the Royal Navy as before the interregnum. It was flown by the Duke of Gloucester on board the "Swiftsure" during the voyage to Dover, his two royal brothers, the King and the Duke of York, flying respectively the Royal Standard (specially made on board the "Naseby," as described in "Pepys' Diary," on account of the proper standard not having been received from the Navy Commissioners before the ship left England, the "Naseby" being re-christened the "Prince" before leaving Schevening) and the anchor flag in *all probability*, although we have no positive knowledge of the use of this flag by the Lord Admiral, when in presence of the Sovereign flying the Standard, before the year 1672.

No royal instructions appear to have been given at the Restoration as regards the flags to be worn by merchant vessels, which were supposed to confine themselves to the use of the plain St. George's Cross, but gradually seem to have adopted the man-of-war ensigns after the Revolution, to put a stop to which a Royal Proclamation was issued by Queen Mary on 12th July, 1694.

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(<sup>1</sup>) N.B.—The red flag, although not worn as an Admiral's flag, was always on board or hoisted at the fore as the signal to engage the enemy in battle.

The only alteration made in the national flag since the restoration of Charles II. was, by Royal Proclamation, the incorporation in it on 1st January, 1801, of the Cross of St. Patrick, "a saltire, gules on a field argent," supposed to be the national flag of Ireland; but as that country has been under the English and British flags since 1172 A.D., and as, previous to that date, there was no flag representing the nation as a whole, St. Patrick's Cross was probably a modern invention derived from the arms of the Fitzgerald family, which were, at the time of the conquest of the island, and still continue to be, "a saltire, gules on a field argent." The name of St. Patrick's Cross, as applied to this flag, does not appear to be of older date than the 17th century.

To construct the New Union flag the heralds had now to join together three flags, "commonly called crosses," instead of two as in 1606 A.D. This was done by raising the reduced St. George's Cross from the St. Andrew's Cross, and inserting between them the St. Patrick's Cross after removing from the latter so much of its white ground as to leave only a narrow border, thus rendering the white cross of St. Andrew, with its blue ground, as clearly visible as in the first Union; the origin of the three flags of which the Union is composed would by this arrangement never be lost sight of; but, with a view to pictorial effect, a slight change was made which requires explanation. The arms of the diagonal cross in the flag representing the combined saltires of St. Andrew and St. Patrick, with the narrow white border of the latter, are "countercharged" (not *counterchanged* as the blazon usually runs); this was a favourite German heraldic device by which the relative positions of the Irish and Scotch crosses appear reversed in the third and fourth quarters with respect to those in the first and second quarters. However ornamental, this device seems scarcely admissible in a "joining together" of the three crosses or flags with the special object of preserving the individuality of each flag. The verbal blazon of the Union of 1801 is, "Azure, the crosses of St. Andrew and St. Patrick quarterly, per saltire, countercharged, argent and gules, the latter fimbriated of the second, surmounted by the cross of St. George, fimbriated of the last." Here again the use of the term "fimbriated" in the blazon has led to six pages of argument by the author of the book on flags already mentioned, accompanied by coloured drawings of the Union as it is, and as he would have it made to correspond with the blazoning, on the erroneous assumption that St. George's Cross is a simple red cross, and the border shown on the flag a mere heraldic "fimbriation" to prevent what is called "the unpleasing effect of metal on metal, or colour on colour."

No change has been made in the Union flag since 1st January, 1801; nor, so long as our present Constitution lasts, does it seem likely that the "meteor flag" under which the battles of Trafalgar and Waterloo were won will undergo further alteration. To be logical, however, should the efforts of the Nationalist party in Ireland succeed in bringing about the Parliamentary separation existing before that date, the St. Patrick's Cross

should be removed from the Union flag, and the latter made to correspond with the original of 1606.

In conclusion, I may observe that, as the red, white, and blue ensigns were derived in 1653 from the red, white, and blue Admiral's flags adopted by the Duke of Buckingham in the beginning of the reign of Charles I., so were the colours of these flags taken from the Union flag. Precedence was given at first to the blue over the white, because the red and blue were the two distinguishing colours of the English and Scotch flags, the white being common to both. In later times the white was given precedence over the blue, from a notion that, as the colour of the cross in the English flag took the first place, that of the cross in the Scotch flag should have the second.





## AN ACCOUNT OF THE OPERATIONS ON THE BENIN RIVER IN AUGUST AND SEPTEMBER, 1894.

*By Lieut. J. D. HICKLEY, R.N., D.S.O., H.M.S. "Phoebe."*

AS an account of the recent operations on the Benin River, which terminated in the capture and destruction of the native town of Brohemie, may be of interest to some of the members of the Royal United Service Institution, I venture to send the following description, as corresponding member in H.M.S. "Phoebe":—

Sunday, August 19th, at St. Paul de Loanda, a telegram was received from the Acting Consul-General of the Niger Coast Protectorate (hereafter called N.C.P.) asking for assistance. We immediately left for Bonny, where we took the Consul-General on board, and left next day for the Forcados Mouth of the Niger, proceeding by that route through a narrow, winding creek running through swamps into the Benin River.

The Benin River itself cannot be entered from the sea except by very small craft, on account of the shoal bar. We anchored off the Brohemie creek, which runs into the northern bank of the Benin River, about six miles from the sea, and close to H.M.S. "Alecto," on Sunday, August 26th, and then learned of a serious reverse which had happened to her steam cutter the day before.

Lieutenant-Commander J. Heugh had been up Brohemie Creek with two N.C.P. officers, Major Crawford and Captain Lalor. Before they had advanced more than about 800 yards, they came to an obstruction which made them suspicious. They were in the act of turning round when a heavy gun-fire was opened on them at very close quarters from a masked battery. The results were disastrous. The two N.C.P. officers had each a leg smashed (Captain Lalor died six days later); the coxswain was mortally wounded; the leading stoker had one foot partly carried away, and an A.B. was dangerously wounded.

In this critical position Chief-Gunner's Mate Crouch immediately discharged a 24-pr. war rocket at the battery, which undoubtedly saved the steamboat. Lieutenant Heugh steered the boat, the disabled leading stoker worked the engines, and they managed to reach the "Alecto," though in a sinking condition, and with the gun dismounted and shield pierced.

Monday, August 27th, "Phoebe" and "Alecto" commenced bombarding Brohemie. This was kept up with more or less frequency, until the town was taken on September 26th. Every night also, the "Phoebe" search-lights, one at a time, were kept playing on the creek

entrance, which was about 700 yards off. The lights never gave out during this long trial.

We also kept three machine guns always manned and ready at a moment's notice, and trained on the creek entrance. A 30-foot pole was rigged above the foretop-mast, and a Jacob's ladder fitted. From this position a few of the roofs of the principal houses could be seen, and in the day most of the shell could be seen when they burst.

The problem was now how to take the town, and it was not an easy one to solve owing to the very unusual conditions.

Here was a large town entirely surrounded by dense mangrove swamps, with the accompanying characteristics of tall trees, tangled roots, soft mud, and no drinking water. There was one excellent means of communication with the outside world, and only one; that was the Brohemie Creek, which is narrow and winding, about 40 feet wide, and only 9 feet deep at high water; but it was known to have obstructions in it, and to be efficiently protected by batteries; boats could only ascend in single line, the current was strong, and there was a risk of their grounding at low tide, when everyone in them would be terribly exposed. For these several reasons, the idea of attacking by means of the creek was finally given up, and the only alternative plan was adopted, namely, to cut a practicable path through the swamp, and attack, if possible, in rear of Nanna's batteries.

The position of the first battery was roughly known, as it was from there that the "Alecto's" boat was fired on; and the first object was to complete a path as near as possible to this work, and then carry it before attempting the town; so on Monday and Tuesday a large party of native bush cutters were set to work with a party of seamen as a guard.

The method adopted for making the road was to fell trees across the route, and then fill up the interstices with branches and leaves. The work was difficult, and not particularly encouraging, on account of the very soft mud for the ground work.

There were four small deep creeks to cross before reaching the stockade; the foundations of bridges were made over these by felling mangrove trees in suitable positions, and when the advance actually took place these were supplemented by planks carried specially for the guns.

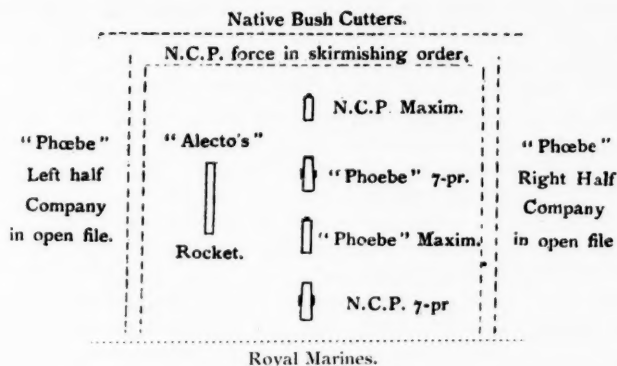
By Tuesday afternoon the path was completed as near to the stockade as was thought safe, and on Wednesday, September 29th, a reconnaissance in force was made in the following order:—

The force consisted of 144, "Phœbe"; 35, "Alecto"; 157 N.C.P.; 80 native woodcutters.

On next page is a general plan of the advance, and it was maintained as far as possible; but it was occasionally unavoidably disturbed on account of the numerous creeks and other obstructions.

The Naval Brigade landed at 7 a.m., after well searching the bush from the ships with quick-firing and machine-gun fire.

The march for about 700 yards was made with comparative ease, though the mud was at times knee-deep; it was then considered that we were near enough to the stockade to try the effect of a few 7-pr. shell.



We fired four in the assumed direction, and then continued to advance; very shortly afterwards the muzzles of some guns were seen through the trees on our right front, and not more than fifty yards off. The word was passed along to the left, and the work was immediately rushed; our guns remaining in rear.

It was then seen how very useful the few 7-pr. shell had been to us.

The stockade contained twenty-three guns from 3-inch to 4-inch smooth-bores, and all these were loaded and primed, and a match was only required to fire any of them. The natives had evidently just run away, as half-empty gin bottles and lighted fires were found. The guns were well mounted on wheeled truck carriages, with good rope breechings, etc. They had heavy charges of powder in them, made up into neat cartridges, and were loaded with long cases of bamboo filled with iron balls and bits of rough iron. In some cases the whole was completed by a round shot. This would have been most destructive to us at such close quarters.

The side of the stockade facing the main creek was 300 yards long, and was the most heavily armed. Just sufficient trees had been left standing to entirely screen the stockade from the view of anyone in a boat. The walls were about 10 feet high, constructed of two or three rows of piles made of hard-wood trunks. Inside there were numbers of small huts for the defenders.

We spiked and dismounted the guns, and then continued the advance from the inland end at about 11 o'clock.

We now began to feel the great drawback of not having sufficiently good local information. We had several friendly natives who could give us plenty of information about the town and the creek, but, as the surrounding swamps were quite untrodden by human feet, the natives were nearly as ignorant concerning them as ourselves, and this, added to their want of intelligence, threw us entirely on our own resources.

We struck away to the right with the idea of not moving straight in the face of the Brohemie guns. The bush-cutters worked well, but the labour was very arduous, and the task for the men on the drag-ropes

and poles of the field and machine guns was almost beyond human strength, the carriages and limbers being frequently up to the axles in soft, stinking mud. Progress was, consequently, very slow, and the next 500 yards from the stockade took us from 11 a.m. to 1.45 p.m.

We then arrived on the bank of a deep creek, 20 feet wide, of which we had no information, and which had to be crossed. A row of native houses was visible about 400 yards off on the other side. From the time we left the stockade until we arrived at this creek, the Brohemie guns had been keeping up a continuous fire, but always too near the main creek. This fire now ceased, and while we were crossing this side creek the enemy preserved a perfect silence.

We cut down several mangroves, and nearly filled the creek up with a semi-floating mass of branches; the men were then able to wade and scramble across, and the 7-prs. and Maxims were dismounted and the parts carried over separately, the 7-prs. being carried across one at a time on the shoulders of a powerful stoker of ours, supported by a shipmate on each side.

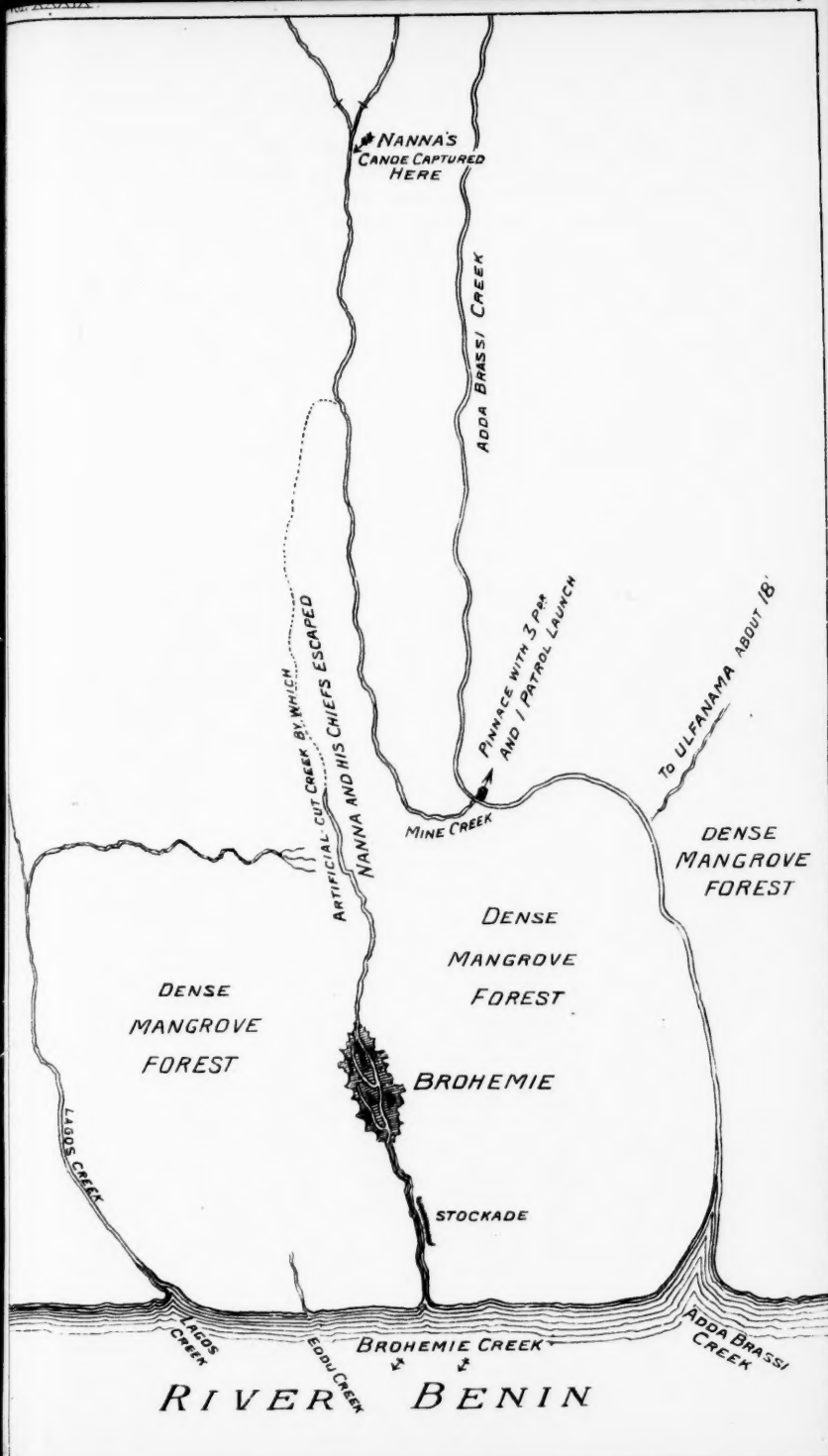
This creek caused a fatal delay, as the whole force was not across and ready to proceed until 3.30 p.m.

There was now about 200 yards of open grass on solid ground, and we imagined that the swamps were finished; but it was not the case, for on reaching the first row of houses it was seen that there was a deep narrow creek in front of them. This was crossed with comparative ease by the men, but proved another very formidable obstacle for the guns.

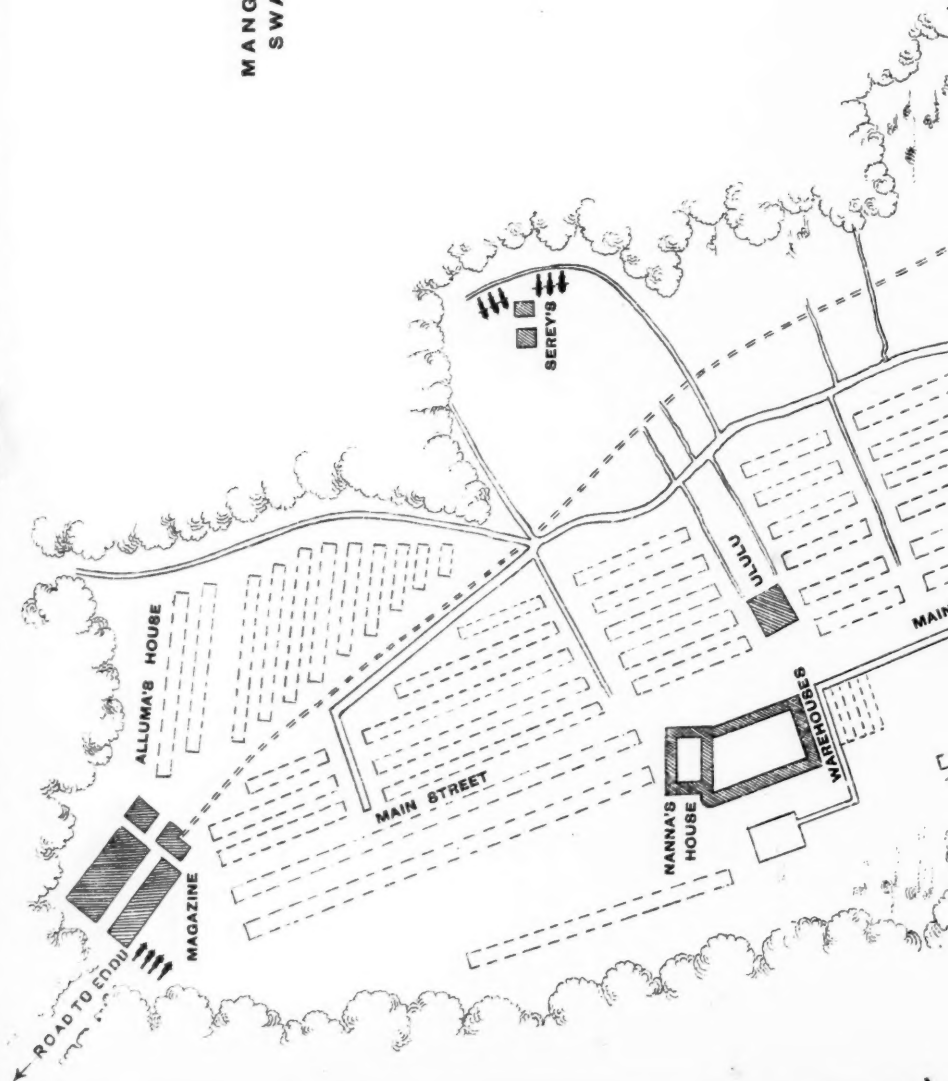
In crossing the open grass we were exposed to a heavy, but badly-directed rifle fire. One of the N.C.P. men was killed, and one of their officers lost a finger. One of our A.B.'s was shot, and a few were struck by spent bullets; but nearly all their projectiles went too high.

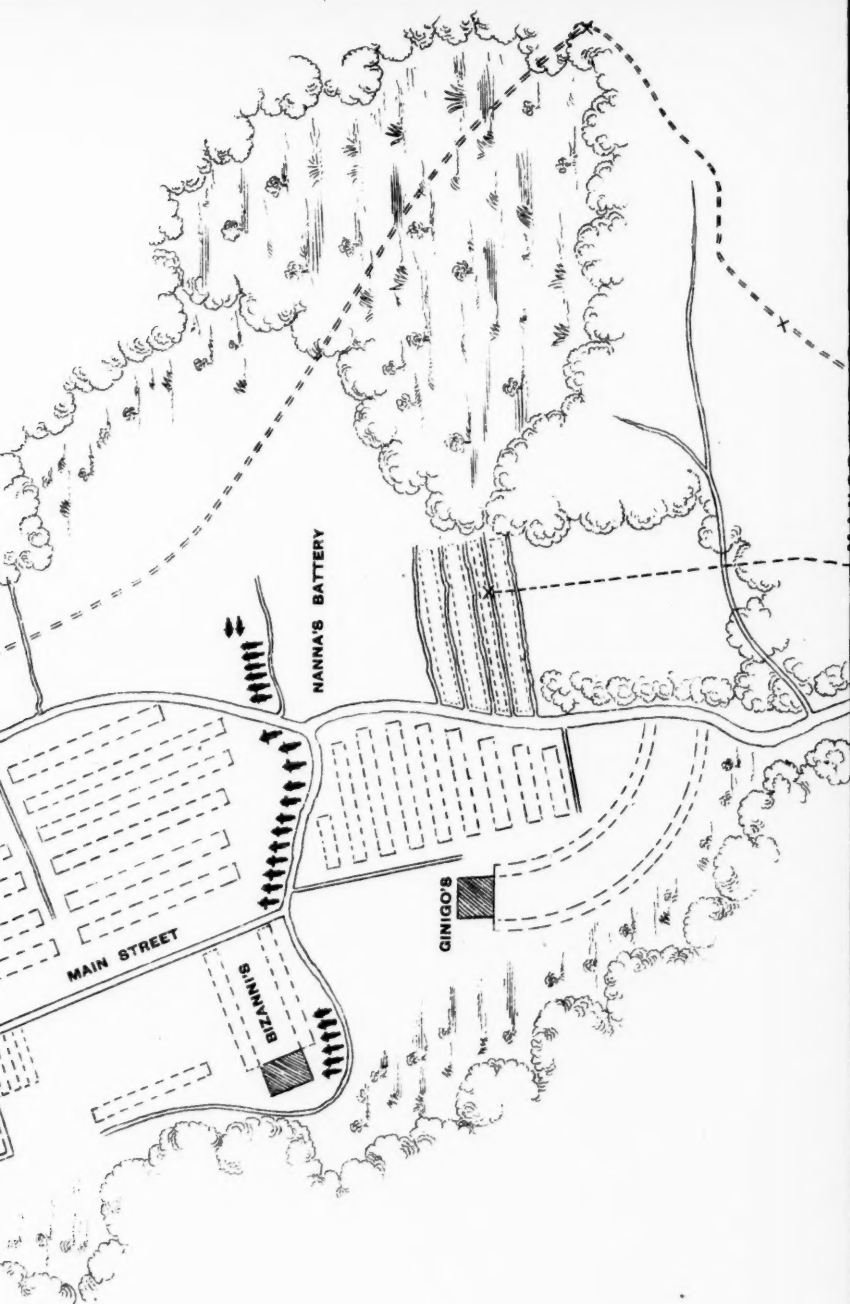
After taking the first row of houses, it was seen that there were three more rows parallel to the first, and all divided from one another by small creeks which communicated with the main one. These proved insurmountable to our guns, the crews of which were nearly fagged out. We could see some roofs of large houses in the town proper, and threw some rockets into them, also fired numerous volleys; but it was now 5.30, darkness was rapidly coming on, our guns were hopelessly bogged, water was running short, and Nanna's heavy guns were getting our range; so, having shown the enemy that we could penetrate to their town without the assistance of the water-way, it was determined to return to the ships. This was done in a very orderly manner, the rear being guarded by the "Phœbe" bluejackets, who held the grass plot in front of the creek till all the force had re-crossed. The enemy commenced to advance on our former front and right flank as soon as they knew we were retiring. They were kept in check by well-delivered volleys.

The tide was now high, and our temporary bridge quite submerged. On this account it was found impossible to get our 7-pr. across, so it was spiked and thrown into the creek. The march back, though difficult in the dark swamp, was uneventful, and everyone got on board by 8 p.m.



MANGROVE  
SWAMP







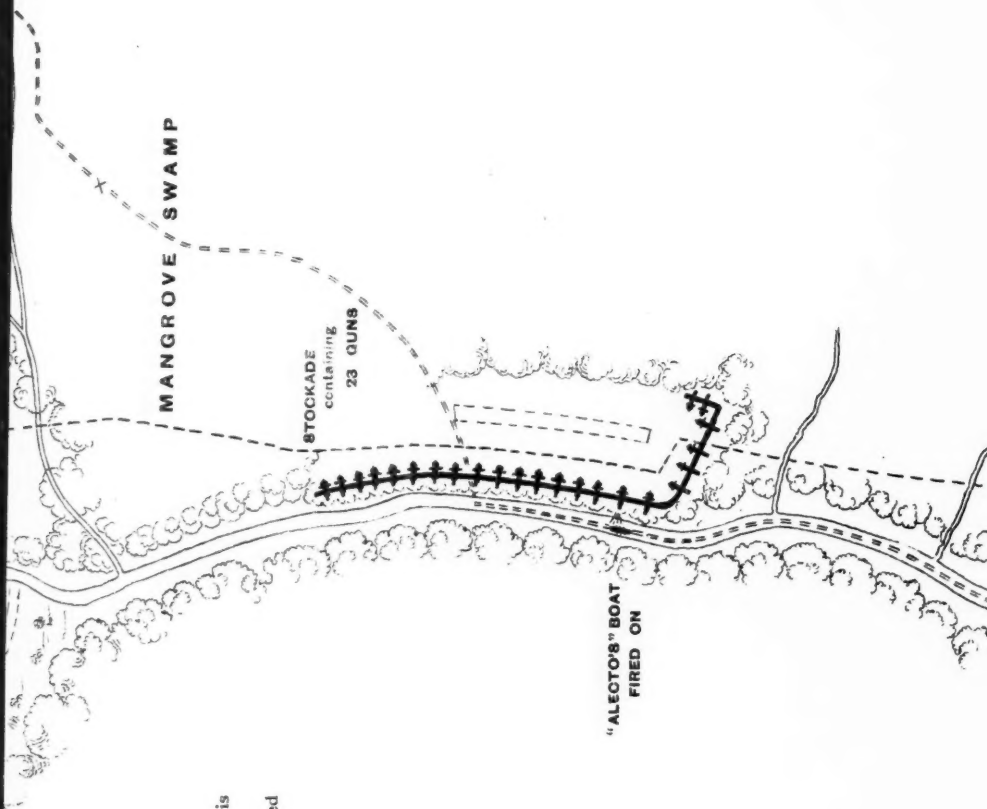
Route of 1st Reconnaissance is  
marked by SINGLE dotted line.

Route of Final Attack is marked  
by DOUBLE dotted line.

MANGROVE SWAMP

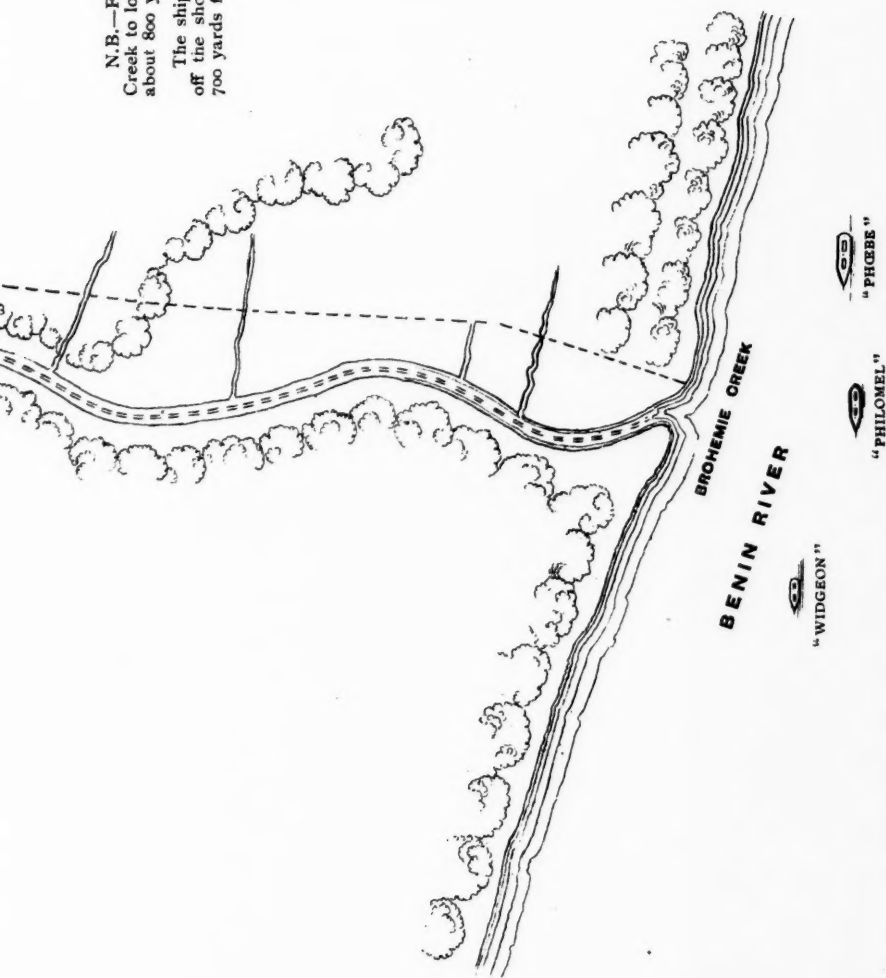
STOCKADE  
containing  
23 GUNS

"ALECOT'S" BOAT  
FIRED ON



N.B.—From entrance to Brohemie Creek to lower corner of Stockade is about 800 yards.

The ships should be placed further off the shore. "Phebe" was about 700 yards from creek entrance.





Telegrams were now sent to the Commander-in-Chief at the Cape, asking for more force, and the nineteen days which necessarily elapsed before his arrival were employed in cutting off Nanna's supplies, and keeping up a steady bombardment on the town.

The position of Brohemie, though it was made an excellent defensive one by the protecting swamps, was now rendered bad by the isolation that they caused; for a mangrove swamp produces no food of any sort, and the main creek being blocked by us caused the town to be almost entirely out of the reach of any friendly supplies of food, though we found that a trifling quantity was carried in across country.

The result was that we soon began to hear from escaped slaves that provisions in Brohemie were running very short. The surrounding creeks were patrolled night and day by two N.C.P. launches, manned by blue-jackets and by the ships' steam cutters. The entrance to Mine Creek was closed by four electro-contact boat mines, and its upper branches were closed by large mangrove trees thrown across, connected to which were charges of gun-cotton and gunpowder, fitted so as to explode if the obstructions were tampered with. Several canoes laden with food for the town were taken and the contents destroyed. The Brohemie side of Mine Creek was also explored to find out if an advance was possible from that direction, but it was not found practicable. The "Phoebe's" pinnacle, with a 3-pr. Hotchkiss, threw a large number of shell into the town from the entrance to Mine Creek.

The Rear-Admiral arrived in the "Philomel" on Thursday, September 18th, and the bombardment was then considerably increased. The "Widgeon" arrived on the 20th.

One N.C.P. officer with a party explored the land on the right bank of Brohemie Creek to see if the ground was any better; it was, if anything, worse. They got close enough to the town to hear talking.

Having now explored every possible route, and finding none of them better than the old one, and all less direct, it was decided to stick to the left bank of the creek, and to commence the final advance from the middle of the deserted stockade, but keeping much more to our right, so as to avoid, if possible, the creek which caused so much delay on the occasion of the reconnaissance.

The new path was commenced on September 23rd. The enemy kept a sharp lookout, and the two days that the road was being cut, the parties were under a heavy fire from the town batteries. Our navigating officer too, in the ship's canoe, had several round shot thrown at him when surveying the creek.

On one occasion in the ship they counted ninety-eight rounds in fifty-five minutes from the Brohemie guns; but the enemy could not actually see us, and his fire was invariably quite ineffective; all the projectiles fell near the main creek, and the only time that they were dangerous was when embarking or disembarking at the stockade; then they came close. Nanna worked his machine gun rapidly on these occasions; but it proved quite harmless.

Tuesday, September 25th, was the day chosen for the final attack.

The force for the land attack consisted of about 100 N.C.P. troops, under Captain Evanson; "Phoebe's" landing party, 136 all told, including a Maxim gun, water carriers, etc., and a gun-cotton party; "Alecto," thirty-five men with rockets; and fifty Marines from the squadron.

All this force was under Captain Francis Powell, R.N., and was accompanied by the Rear-Admiral and staff. "Widgeon" formed a reserve.

The party for attacking by the creek and covering the land advance consisted of the "Philomels" in their boats, under Captain Campbell. They eventually landed and marched into the town, where they met the remainder of the force.

As the creek was now clear as far as the stockade, we were able to go up it and land there, the ships' guns all the time firing on the town.

We landed at 5.30 a.m., and the squadron gun-fire ceased at 6.30. A very large amount of time and labour was saved by landing at the stockade.

The path was very bad at first, liquid and stinking, but improved as we got more to the right; and when we rounded the head of the creek, which had previously caused such a great delay, the marching was comparatively easy.

The enemy, finding their guns attacked in the rear by this flank movement, were quite at a loss, and offered a very feeble resistance. A desultory and badly-directed fire was opened on our left, but was stopped by a few volleys, and we marched into Brohemie with no more trouble than was occasioned by the crossing of the numerous small creeks.

We got into the town at 8.15, and found it to be large, clean, and well built. It was chiefly remarkable because it was planted on an artificial site, formed by clearing away the mangrove trees, and manufacturing a solid foundation with white sand, which was brought from some forty miles up the river. The majority of the houses, too, were equally the result of immense labour; the walls were built of a very fine, hard red clay, which was brought by canoes from a long distance.

The different chiefs' houses were wooden, two-story buildings on a European model, and roofed with galvanised iron.

The principal street ran between Alluma's house and Nanna's battery; it was about 1,000 yards long, and 40 yards wide, perfectly straight, and beautifully clean, with a surface of hard white sand. The houses each side were superior ones, and were roofed with galvanised iron.

This street for its whole length, and the adjacent buildings, had suffered very severely from shell fire. Hardly a building had escaped some sort of perforation, and the land was ploughed in all directions by the bursts of 4.7-inch shell.

The finest house was Alluma's, and it also contained the principal magazine. This was on the ground floor; the walls were 18 inches thick, of hard clay; outside these were ironwood piles, the whole faced with sheet iron. There was a large quantity of powder—28,000 lbs., in 20-lb.

kegs—all of English make. Stowed among the powder were numerous cases of kerosine and benzine. The dwelling apartments were immediately above, and had evidently been well furnished, as the walls were almost covered with very large handsome mirrors. The bedrooms had beds with spring mattresses, etc.

We left a guard of N.C.P's here, and then, after spiking six guns which were mounted near the house, we marched down the main street to Nanna's quarters, where we halted and met the "Philomels" advancing from the opposite direction.

Nanna's house was connected with an extensive range of warehouses containing his trade stores. These were in very large quantities and fairly valuable. The principal items were cotton, cloth, gin, and guns. There were over 3,000 cases of gin, containing six bottles each; also a considerable amount of rum and gunpowder. The storehouses were European built with iron roofs.

The "Phœbe" occupied Nanna's quarters, and remained as permanent garrison. The "Philomels" and "Widgeons" returned to their ships.

Next day, Wednesday, 26th, the "Philomels" landed and marched one-and-a-half miles to a town called Eddu, which was friendly to Nanna. It was quite a small place, and no resistance was offered worth mentioning. The garrison commenced the destruction of Brohemic, which continued till Sunday evening.

Thursday, 27th, a party of the "Philomels" went to the upper part of Brohemic Creek to capture, if possible, Nanna's war canoes, which were known to be trying to cut a passage out. They found nine, all jammed together in a narrow ditch or cutting. They had nearly got through. Their guns had been removed, and the canoes (which were fine vessels some 40 feet long, hewn out of enormous single logs) were laden with merchandise. The canoes were sent down to Brohemic, and then the slaves which had been scattered about in the surrounding bush began to come in. They were in the most pitiable state of emaciation and wretchedness; several died soon after landing. About 1,500 came down, and there was considerable trouble in feeding them; but as we had now free communication by boats between the town and squadron, we were able to get large quantities of supplies, which were served out to the starving folk by the bluejackets.

One of the head men told us of a curious brass gun which was buried under Alluma's house, and which was a sort of emblem of sovereignty. We dug it up, and found it to be a handsome old brass Spanish gun, elaborately ornamented; it was a 3-inch, about 6 feet long. Date 1703, with an inscription "Francisco Mir fecit."

Nanna was known to have been up the cutting with his war canoes, and, as these had been taken, it was expected that he would attempt to escape in a small canoe. So on Thursday night the "Phœbe's" and "Philomel's" steamboats were sent to try and cut him off.

The boats left the squadron at 9 p.m., and, steaming quietly, reached

the upper waters of Mine Creek shortly after midnight. The night was very dark and calm, and as the upper creek was in places only some 12 feet across and closed in by high mangrove walls, the blackness and silence were intense. The narrow, winding, strip of sky overhead was the guide for steering.

One boat remained at the entrance of each branch, and waited under cover of the mangroves. Shortly after 3 a.m. a canoe was heard approaching, the occupants evidently quite unsuspecting, as they were talking loudly. An attempt was made by the "Philomels" to detain the canoe, but on the first movement all the people in her dived into the black water, and immediately afterwards they were heard crashing away through the mangrove roots. Fire was at once opened on them from both boats with machine guns and rifles, but without result, owing to the darkness. The canoe was secured, and was found to contain Nanna's personal valuables, £324 in English money, his private correspondence, etc.; so he evidently had been in the canoe. Among other provisions we found six quarts of champagne.

At daybreak the canoe was towed back, and the contents handed over to the Acting Consul General.

In Brohemie and outworks 106 guns were destroyed, all smooth bores of English make. Their calibres ranged from 3 inches to 6 inches. The majority were 4 inches. Some were destroyed by gun-cotton, of which half a disc was usually sufficient for the work; others were thrown into the Benin River. The two largest guns were 32-prs. Most of them were in a good state of preservation.

The Naval Brigade finally evacuated the place on Monday, October 1st, and the "Phœbe's" 7-pr., which had been left in the mud three weeks before, was luckily recovered on this Monday afternoon. A party of naked Kroomen who were taken to wade in the mud in the supposed position felt it with their toes; it had sunk 4 feet in the soft mud.

The only casualty that happened to us when Brohemie was taken was caused by a 24-pr. war rocket, which burst on leaving the tube. The base fractured the skull of the "Alecto's" chief-gunner's mate, who was in charge of the tube.

The "Phœbe" then went to Fernando Po and Ascension. Immediately she got to sea malarial fever began to appear, and by Sunday, 14th October, there were 112 cases, out of a complement of 219. The majority of the cases were serious, and six deaths occurred.

A noticeable point in connection with the bombardment was the excellence of the 4.7-inch percussion fuzes. About 1,100 shell were fired by us, and they could almost always be heard bursting. In the town only three blind shell were recovered.

The town was, of course, invisible from the guns; they were laid for elevation by Watkin's clinometer, and for direction by Standard compass, and the results were very satisfactory.

H.M.S. "Phœbe," St. Helena.

*November 20th, 1894.*



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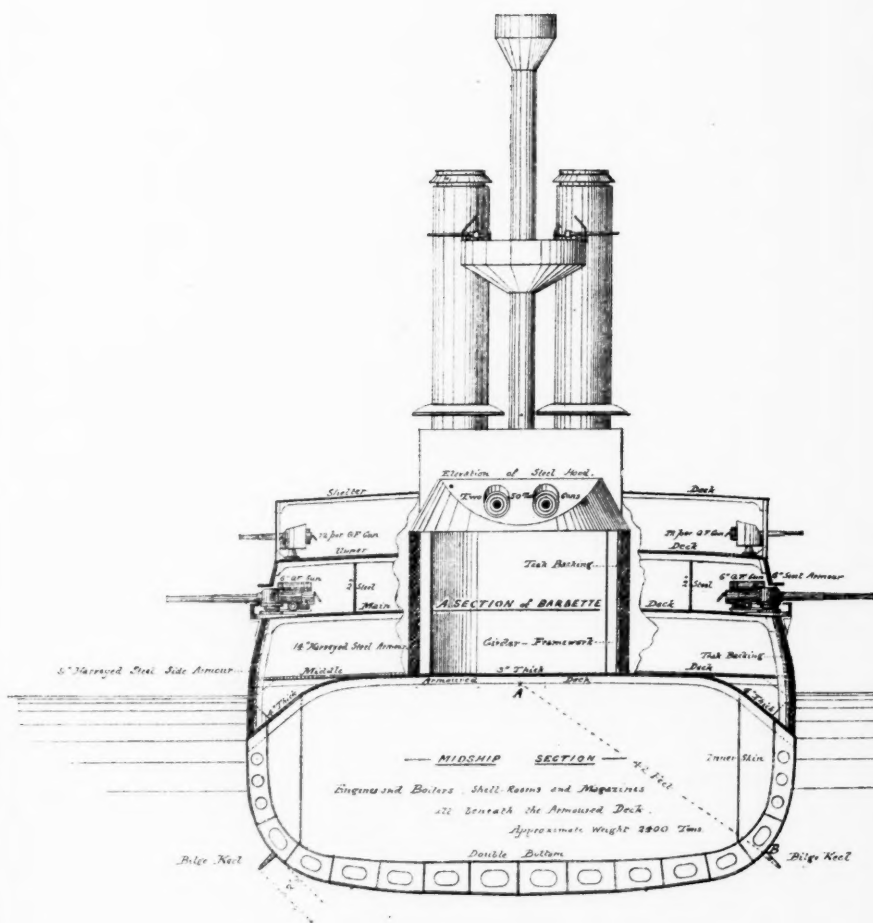
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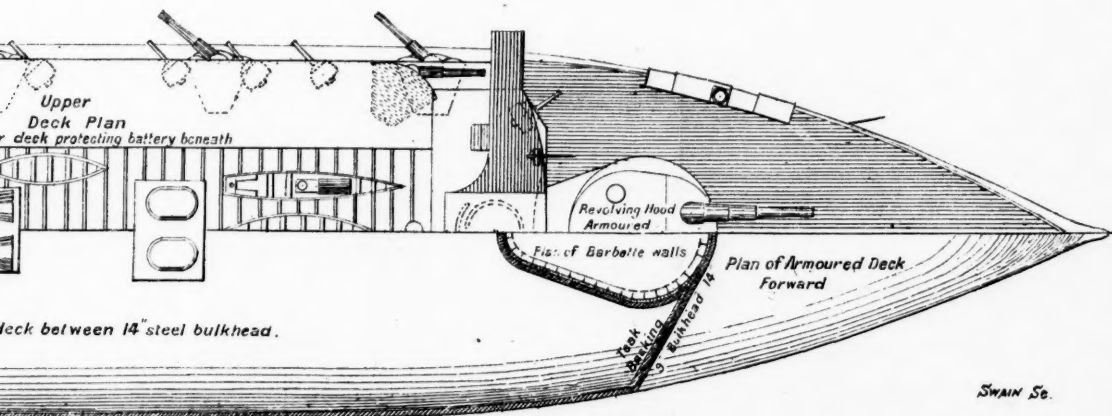
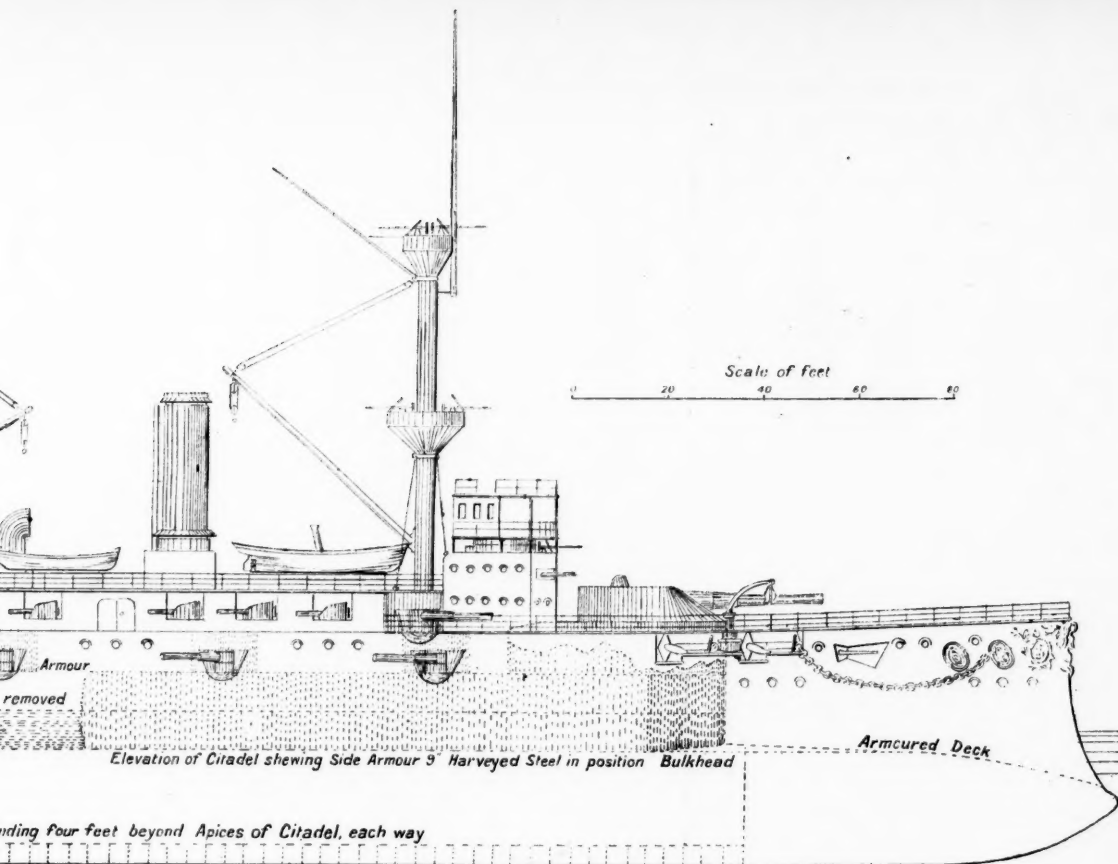
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## NAVAL AND MILITARY NOTES.

### NAVAL.

HOME.—The following are the principal appointments which have been made: Vice-Admiral—J. Erskine to command of North American and West Indian Station, vice Sir J. Hopkins, K.C.B. Captains—A. K. Bickford to "Resolution"; R. W. Stopford to "Howe"; J. C. Burnell to "Wildfire," as Captain-Superintendent of Sheerness Dockyard. Commanders—C. E. Gladstone to "Fearless"; E. D. Ommancy to "St. Vincent"; A. Douglas to "Royalist"; H. C. Baynes to "Hearty"; R. G. Tupper to "Daring"; F. R. Morgan to "Imogene"; A. W. Torlesse as Assistant to Director of Naval Ordnance.

The new first class battleship "Majestic," a sister ship to the "Magnificent," was successfully floated out of dock at Portsmouth on the 31st ult. The christening of the ship was performed by H.R.H. Princess Louise, on behalf of the Queen.

In last month's notes we gave a long account of the "Magnificent," which we took from the special report in the *Times*; and we are again indebted to that journal for the following particulars about the "Majestic," which are also of interest. We are much indebted to the courtesy of the editor of the *Engineer* for the accompanying plans of the two ships, he having placed the blocks at our disposal for the purpose of printing off the necessary copies for issue with the Journal.

"The modern policy of rapid naval construction was initiated by the present Controller of the Navy, Admiral Sir John Fisher, when superintendent at Portsmouth, and his excellent example in promoting a spirit of healthy emulation between the various national dockyards has been followed and enforced by Admiral Fane. Not many years ago an armour-clad took four years to build, and she became, in some instances, partially obsolete before she left the stocks. Now the whole system has been changed. It was confidently thought at the time that the progress of the 'Royal Sovereign' could not be surpassed. Sixteen months only elapsed between the laying down of the keel-plate and the launch, and the work remaining to be completed, which naval experts stated could not be carried out in less than fifteen months, was really accomplished in six. As a matter of fact, the 7,250 tons of the 'Royal Sovereign,' in consequence of the large amount of armour that was fitted while in dock, represented the greatest weight ever put off the blocks up to the present moment. But the record of that battleship was eclipsed by that of the 'Magnificent,' at Chatham, which was built in a twelve-month, and took the water after having had 6,100 tons of material worked into her structure. The exceptional feat, however, which has been performed in the construction of the 'Majestic' is one of which the Portsmouth Dockyard authorities are laudably proud, because, not only does it transcend the Chatham achievement, but it constitutes an unprecedented exploit in armoured shipbuilding. She was laid down in No. 13 dock on February 5, 1891, and has been floated out after an interval of five days less than a year with a displacement of 7,300 tons. It will thus be seen that, while she was a shorter period on the blocks, her launching weight was greater than that of the Chatham ship, and that she is, in fact, the most advanced of the vessels building under the Spencer programme.

"Extraordinary and gratifying as this progress is, it has been achieved in spite of numerous drawbacks. The laying down of the keel-plate in an open dock was delayed by inclement weather, the later stages of the ship were retarded by the non-delivery of armour by the contractors, and the constructors were harassed by having to complete eleven vessels built under the Naval Defence Act and



simultaneously to prepare for the laying down of two first class battleships, the 'Prince George' and 'Cæsar.' As matters stand it may be said that the 'Majestic' has a considerably greater weight of fittings and of material worked into the general structure of the hull than has been previously accomplished in the time. The citadel armour has been attached to the sides; the lower portion of the armour on the redoubts, protecting the 12-inch gun gear, is fitted, while the belt armour has also been completed, with the exception of the closing plates, which are necessarily left until the last. The turntables for carrying the heavy guns, as well as the military masts, are ready for erecting. The four submerged tubes, manufactured in the yard, are actually on board, and as the ship is prepared to receive her propelling and other machinery it is anticipated that she will be ready for her steam trials in August next. It has long been the practice of amateurs, official and other, to reflect upon the dilatory, and inferentially the costly, character of the shipbuilding methods pursued in the dockyards, and to compare them in these respects unfavourably with private firms, and a Royal Commission once went to the extreme length of recommending that the establishments should be confined to carrying out refits and repairs. But the yards have now vindicated their reputation from reproach to the satisfaction of the country.

"The following comparative statement between her dimensions, weights, and armaments, and those of the 'Royal Sovereign,' which was floated out of the same dock by the Queen on February 26th, 1891, will enable the reader not only to form a judgment as to her general characteristics as a fighting ship of the first class, but to perceive at a glance how it has been possible to build a larger, and in many respects a more formidable, armour-clad without very seriously increasing her displacement :—

	"Royal Sovereign."	"Majestic."
Length ... ..	380 ft.	390 ft.
Breadth ... ..	75 ft.	75 ft.
Draught (mean) ... ..	27 ft. 6 in.	27 ft. 6 in.
Do. (moulded) ... ..	44 ft. 5½ in.	45 ft. 3 in.
Displacement ... ..	14,150 tons	14,900 tons.
I.H.P. (forced draught) ... ..	13,000	12,000
I.H.P. (natural draught) ... ..	10,000	10,000
Speed (forced) ... ..	17¼ knots	17¾ knots
Do. (natural) ... ..	16¾ knots	16½ knots
Freeboard, forward ... ..	19 ft. 6 in.	25 ft.
Do., aft ... ..	18 ft.	18 ft. 6 in.
Do., midship ... ..	17 ft. 3 in.	17 ft. 9 in.
Length of Armour belt ... ..	250 ft.	216 ft.
Depth of belt ... ..	8 ft. 6 in.	14 ft. 9 in.
Thickness of belt ... ..	18 in., 16 in., 14 in.	9 in.
Thickness of armour bulkheads ... ..	16 in. and 14 in.	14 in. to 12 in.
No. of casemates ... ..	4	12
Length of side armour above belt ... ..	141 ft.	nil
Thickness of do. ... ..	4 in.	nil
Thickness of casemates ... ..	6 in.	6 in.
Do., of armour screens ... ..	3 in.	nil
Do., of belt-deck ... ..	3 in.	4 in. on slopes, 3 in. on flats amidships to 2½ in. at ends.
Do., of barbettes ... ..	17 in., 11 in., 6 in.	14 in. and 7 in.
Do., of conning tower ... ..	14 in.	14 in.
Do., of director tower ... ..	3 in.	3 in.
	Four 67-ton guns in barbettes, six 6-in. quick-firing guns on upper deck, four in casemates on main deck and 19 small quick-firing guns.	Four 50-ton guns in barbettes, eight 6-in. quick-firing guns in casemates on upper deck, four do. on main deck in casemates, and 28 small quick-firing guns.
	Five above-water torpedo tubes, one in stern, and four on broadside.	One above-water tube in stern and four submerged tubes.
Weights in tons:—		
Steel in hull ... ..	3,487	4,340
Wood decks, etc. ... ..	590	570
Backing ... ..	140	160
Fittings ... ..	800	850
Hull, complete ... ..	9,680	10,180
Protective material ... ..	1,298	1,410
Armour ... ..	3,436	2,850
Equipment ... ..	—	6,00
Armament ... ..	1,410	1,500
Machinery ... ..	1,100	1,300
Coal, normal ... ..	900	900
Coal, full ... ..	1,400	1,850

"Besides her additional length, the 'Majestic' has important superiority in the protection of her auxiliary armament; the casemates having been increased from four to twelve, whereby the complete isolation of the gun detachments is secured; while a valuable modification has been made in the arrangement of the upper-deck battery. Instead of an open space liable to be swept by the machine and quick-firing guns of the enemy, both from the armoured top and otherwise, this is now enclosed and decked over with a steel shelter deck, the four armoured casemates at either corner acting, moreover, as screens to prevent a raking fire

from either quarter. The depth of belt is much greater, and the coal-carrying capacity has been enlarged from 1,400 tons in the 'Royal Sovereign' to 1,850 tons, in order to enable her to operate on an enemy's frontier or to steam long distances. Her total weight of protective material is also greater. Strong armoured shields are fitted to the turntables and revolve with the guns, an advantage not hitherto possessed by battleships of similar dimensions. A saving of weight has been effected in the barbette armament, which is composed of four 50-ton 12-inch guns, which, Sir H. W. White has observed, had they been available in 1889, would probably have been preferred to the 67-ton ordnance. The new guns have a length of 35 calibres, and would have been made even longer had not the difficulties suggested by the ship constructors been considered to outweigh the advantages gained by the extra length from a gunnery point of view. They are capable of discharging a projectile at intervals of less than  $1\frac{1}{2}$  minute, are understood to be superior to the heavier types in penetration, and in consequence of their comparatively small weight have enabled the mountings and fittings to be proportionately reduced in size. The arrangements are such that the guns can be loaded and worked from any position by manual appliances, but without dispensing with the advantages obtainable from hydraulic power and fixed stations. An important economy in weight has been effected here; but unquestionably the most appreciable saving has been gained in the armoured protection. The belt on the sides, though increased in depth, has been considerably reduced in length. This difference, however, is more than compensated for by the circular form of the armour bulkheads at the ends, which extend for some distance forward and aft and protect the foundations of the barbettes, and are a decided improvement upon the straight bulkheads of the 'Royal Sovereign.' A sudden descent has been ventured from a *maximum* thickness of 18 inches in the vertical armour to a uniform thickness of 9 inches. But this startling decrease has been justified by the blending of the turtle-back protective decks of the cruisers with the citadel armour of the battleships, and by the introduction of Harveyized solid steel armour, which greatly increases the power of the plates to resist penetration. Over 3,000 tons of this manufacture are distributed throughout the ship, fully protecting the machinery, guns, magazines, and screws. The spandrels produced between the sides and the rounded slopes of the turtle-deck will be filled with coal as a supplementary defence against shell fire. The 'Majestic' will carry a complement of eighteen boats, of which four are steam-boats capable of acting independently of the ship for purposes of torpedo attack; and six search-light projectors worked by three dynamos of 600 ampères each. Her crew will consist of 757 officers and men.

"The propelling machinery, designed by Mr. A. Blechynden and built by the Naval Construction and Armaments Company, consists of two sets of triple-expansion vertical direct-acting engines. The cylinders are, high-pressure 40-inch, intermediate 59-inch, and low-pressure 88-inch diameter, having a stroke of 51 inches. The valves are of the piston description for the high-pressure cylinders, and double-ported slide valves for the others, and are actuated by the ordinary double-bar link motion. The back columns are cast of the inverted Y shape, securely tied together at the top by a wrought-steel plate, and form the piston-rod guide supports. The front columns are made of forged steel, and are strongly braced by horizontal and diagonal stays; while the bottom frames are of cast steel connected together by cast-steel girders and secured to the frames of the ship. The main and auxiliary condensers are formed of brass throughout, and possess a cooling surface of 13,500 square feet and 1,800 square feet respectively. There are also in the engine-rooms two main-feed pumps, two evaporators and distillers, four bilge and fire engines, two auxiliary air and circulating pumps, four powerful centrifugal pumps, one drain-tank pump, two ventilating fans, two reversing engines, and a brace of turning engines. In each of the four separate boiler compartments into which the ship is divided are two single-ended

cylindrical return tube boilers, 16 feet 4 inches in diameter by 10 feet 3 inches long. Each boiler is provided with four corrugated furnaces fitted with a couple of combustion chambers. The boiler rooms are equipped with auxiliary feed-pumps and forced draught fans. Supplementary machinery rooms are placed at the sides of the ship containing dynamos, air compressors, ventilating fans, and workshop appliances. The contractors undertook to deliver the engines by the end of May, but, although greatly pressed with work, they are delivering the machinery already. It will thus be seen that they are anticipating the conditions of their contract by about four months. Including the 'Majestic' and the 'Powerful,' the Naval Armaments Company have on hand at the present time machinery for the Government to the extent of 71,000 horse-power."

The sheathed sloops "Torch" and "Alert," which have been built side by side in No. 2 dock, at Sheerness, were floated into the steam basin on the 28th December. Their building was commenced on December 8th, 1893; they are 180 feet in length, 32 feet 6 inches in breadth, and when completed for sea they are to draw 11 feet 6 inches of water. They will each have a displacement of 960 tons, and are to be armed with six 4-inch quick-firing, four 3-pounder quick-firing, and two machine guns. The machinery for both vessels has been made at the dock-yard under the superintendence of Mr. W. W. Chilcott, R.N., chief engineer of the yard. Working with forced draught the engines are to indicate 1,400 horse-power, with an estimated speed of 13.25 knots per hour. The natural draught maximum power is to be 1,200, which it is estimated will give the vessels a speed of 12.25 knots per hour. They are both to be fitted with three masts, and will be ready for sea by July next.

The Admiralty have decided that the new cruiser "Powerful," building by the Naval Construction and Armaments Company at Barrow-in-Furness, and the "Terrible," building by Messrs J. and G. Thompson at Glasgow, are each to carry a crew of 894 officers and men. The vessels of the "Royal Sovereign" class (the largest battleships afloat) carry a complement of 730 officers and men each, including the Admiral's staff. The armament will consist of two 9.2-inch breech-loading, twelve 6-inch quick-firing, sixteen 12-pounder 12 cwt. guns, one 12-pounder 8 cwt. boat's gun, one 12-pounder 8 cwt. field service gun, twelve 3-pounder Hotchkiss quick-firing guns, and nine Maxim machine guns. There will also be supplied about twenty Whitehead torpedoes for use with submerged torpedo tubes, four of which will be built into each vessel. Although these ships have been in hand for nearly a year, the contractors do not expect to have them ready until the beginning of 1897. They will then have to undergo a long series of official trials, so that at the earliest they cannot be ready for sea until the spring of 1898.

The "Raleigh," which for the last six years has been acting as flag-ship at the Cape, has arrived at Plymouth and will be paid off. The first class cruiser "Grafton" has also returned from the Cape, bringing home the paid-off crews of the "Philomel," "Thrush," and "Penelope." She has made the run home from the Cape in twenty-one days, including a stoppage of forty hours at Las Palmas to coal.

The second class cruiser "Sybille," which is to relieve the "Amphion" on the Mediterranean Station, made an average of 19 knots on her commissioning speed trial; she was detained to make good some slight defects, but has since left, conveying the "Dryad" to Gibraltar.

The "Indefatigable" has had a satisfactory trial of her new bow gun and mounting. The original weapon was a 6-inch breechloader on the Vavasseur central pivot Mark II. mounting; but this has been replaced by a 6-inch quick-firing gun on the upper deck, Mark I. mounting, and the trials have confirmed the favourable result arrived at in the "Iphigenia" during the manœuvres. In fact, it was in consequence of the report on the working of the "Iphigenia's" ordnance

that the alteration was made in the "Indefatigable," and all the cruisers of that class are now undergoing a similar alteration with the view of lightening their bow and stern ordnance.

It is reported that the new second class cruiser "Iphigenia" has been ordered to be passed out of the Fleet Reserve at Portsmouth and sent to Southampton, where, as tender to the guardship "Australia," she will become a drill-ship for the Royal Naval Reserve.

The official trial of the new torpedo-boat destroyer "Boxer," built and engined by Messrs. J. I. Thornycroft and Co., of Chiswick, took place on Friday, the 25th ult., off the Maplins. Leaving Greenhithe at 10.50 a.m., the vessel proceeded to the trial ground, where six runs on the measured mile were made with the following results:—

Time min. sec.	Speed.	Revolutions	
		Starboard.	Port.
2 2'6	29'364	425'7	400'3
2 4'4	28'939	420'5	419'6
2 1'4	29'654	415'1	407'7
2 9	27'907	408'3	406'0
1 58'6	30'354	418'3	411'8
2 9'8	27'735	411'4	410'0

The mean speed during three hours' running, as measured by the total number of revolutions made, was 29'17 knots; the total distance covered in that time being 100'6 statute miles. This speed exceeds that ever obtained on an official trial by more than a knot. The four vessels of the class, namely, the "Daring," "Decoy," "Ardent," and "Boxer," all built by Messrs. Thornycroft and Co., have each beaten the record in turn, and are now the four fastest vessels in the world.

FRANCE.—The following are the principal appointments which have been made:—Vice-Admiral Besnard, Maritime Prefect at Brest, has been appointed Minister of Marine. Capitaines de Vaisseau—Bayle to "Duguay-Trouin," in command of Naval Division of the Pacific; Pénaud to "Amiral-Baudin"; Melchior to "Tage"; De Bausset-d'Arbaud to command of Submarine defences at Brest; Roberjot to "Formidable." Capitaines de Frégate—Dufayot de la Maisonneuve to "Cosmao"; Le Pord to "Tourville"; De Mazenod to "Nielly"; Chocheprat to "Aube"; Sibaud to "Shamrock"; Collin to "Bienhoa."—*Le Moniteur de la Flotte.*

The armoured cruiser "Latouche-Tréville" is still continuing her official trials at Cherbourg before she is accepted from the contractors. With the engines developing 2,000 indicated horse-power, and 80 revolutions of the screws, a mean speed of 13 knots was maintained; on a further six hours' run with 7,500 indicated horse-power, the mean speed was 18 knots. Some tubes in her condensers are to be replaced, and the machinery overhauled before making a three-hours' forced draught trial, when the engines should develop 8,300 indicated horse-power, and the speed be 19 knots.

The armoured cruiser "Dupuy-de-Lôme" has not yet re-commenced her trials, and it is now feared that her speed will fall short by two knots of what was expected, as it is believed that it will be necessary to reduce the grate surface, to avoid a collapse similar to that of the "Fleurus." The new second class cruiser "Friant," undergoing her trials at Brest, has also been obliged to come into the hands of the dockyard, as, on her three hours' forced draught run, the plates of the uptakes of her funnels became red-hot, so the trial was brought to an end; she had, however, attained a speed of 19 knots, which was considered satisfactory. It is reported that the necessary work will take three months; among other alterations, her two military masts have been

much reduced in height, which has involved the removal of the fighting tops with their four 3-pounder quick-firing guns.

The dockyard officials at Brest have been ordered to make the preliminary calculations for the displacement and stability of the new battleship shortly to be commenced at that port. She is to be generally on the lines of the "Charlemagne," and is to be named the "Gaulois."

A commission appointed by the Minister of Marine, under the presidency of Rear-Admiral de Slane, has been enquiring into the stability of the new battleship "Magenta," now forming part of the Active Division of the Mediterranean fleet, and has reported that it will be advisable to lower her superstructure 3 feet 6 inches, and also remove one of the military masts, as is being done in the "Brennus." Similar modifications are being made in the superstructure of the "Hoche" at Brest, and it is further reported that great alterations from the original design are to be made in the superstructure of the new battle-ship "Charles Martel," also completing at that port.

The Minister of Marine has definitely decided on the suppression of the Flying Division, in consequence of the commissioning of the "Melpomène" as a seagoing training ship for seamen; and on the arrival of the squadron at Brest in the early part of this month, Rear-Admiral Maigret, in command, hauled his flag down, and the three vessels composing it, the "Naiade," "Nielly," and "Rigault-de-Genouilly," will be paid off into the second class Reserve.

The protection of the Fisheries, which has been one of the duties of the squadron since its formation, will now be carried out during 1895—off Iceland, by the despatch vessel "Manche"; off Newfoundland, by a small squadron composed of the third class cruiser "Laclocheterie" (on board of which the senior officer will hoist his pennant), and the despatch vessels "Nièvre" and "Hussard," the latter being detached from the Atlantic Division for this duty. The "Manche" will be commissioned on the 4th March, and the "Laclocheterie" and "Nièvre" on the 1st April. The "Melpomène" will also commission at Brest on the 4th March, to take up her duties as a seagoing training ship for seamen.

The torpedo boat No. 60, attached to the "Défense Mobile," of Dunkirk, lately proceeded to Calais, via Gravelines, by canal; although hampered by the accumulation of ice, the small vessel covered the distance in about twelve hours. The experiment had a special interest, as it has proved the possibility of maintaining the communication by water between the three seaports by means of the Bourbourg, Colme, and Calais canals and the River Aa. In case of a blockade of one of these ports, the torpedo boats of the Dunkirk section of the "Défense Mobile" will thus be able to pass from one port to the other, as required, without fear of interruption.

By a decree dated the 5th December, 1894, the Minister of Marine has directed:—

- 1st.—That the levée of the "Inscrits Maritimes," aged from eighteen to twenty years, which had been suspended, is authorised in France and Algeria from the 10th January to the 31st May, 1895.
  - 2nd.—That the length of service necessary before the men become entitled to join the Reserve is to be four years dating from the 1st January, 1895.
  - 3rd.—That the re-entry of men who have been discharged is authorised from the 1st February to the 30th April.
- Finally.—That Volunteers are to complete the full period of service for which they engaged themselves at the time of their entry.

Some modifications have been made in the organisation of the Etat-major-général of the Navy. According to the new decree the duties of the Chief of the General Staff will be restricted to the study and working out of the various questions which arise in maintaining the naval forces of the country in a proper

state of preparation for war. He will not interfere in the other Departments of the Ministry of Marine, except in so far as his position of responsibility for the commissioning of ships and the movements of the naval forces under ordinary circumstances, as well as for due continuity in the work of new construction, compels him to do so; but he is to take, in concert with other authorities, the necessary steps for insuring, in the event of war, the prompt and complete mobilisation of the fleet.

Instructions have been given from the Ministry of Marine that the torpedo-boat station at Morlaix in the Taureau roadstead is to be transferred to Aberwrach, situated nearer to the entrance to the Channel; and the hulk "Obligado," which serves as the dépôt-ship for the torpedo-boats, has been towed to its new moorings.

The new river-gunboats for service in Madagascar are to be ready by the latter part of March. Four are being built at Havre, and four in the yard at La Seyne, near Toulon. They will be very similar to, but much smaller than, the "Herald" and "Mosquito," the English gunboats on the Zambesi; their dimensions being: Length, 82 feet; beam, 17 feet 10 inches, with a displacement of 41 tons; their draught of water will only be 1 foot 6 inches; they will have a speed of 6·5 knots, and will carry two small quick-firing guns; they will be built in six separate water-tight compartments, and will be put together on arrival at their destination.—*Le Yacht, Le Moniteur de la Flotte, and Le Temps.*

We have deferred giving any description of the new French coast-defence ships, but as the "Jemmapes," the first to be commissioned, has now practically completed her trials, and is to be attached to the squadron of the North, the following details with a photograph of the ship (*see frontispiece*) may prove interesting:—Four of these vessels, the "Jemmapes," "Valmy," "Tréhouart," and "Bouvines" were laid down at the end of 1890 and in the early part of 1891, it being originally intended that they should be exactly alike with low freeboard fore and aft; later on, however, it was decided to raise the fore-part with the gun and turret of the two last named some six feet, so as to improve their sea-going qualities, at the same time 3 feet 3 inches were added to their beam; the "Jemmapes" and "Valmy" were, however, completed according to the original design, the plans for all four having been drawn by Mr. Bussy, the Chief Constructor of the Navy. These four ships form an intermediate class, as they are about a thousand tons larger than the "Fulminant," the largest of the four vessels of an earlier type (although these differ materially in tonnage and speed), while they are some five hundred tons smaller than the four ships of the "Cäiman" type, which, however, are inferior in speed by nearly two knots to the new vessels. The dimensions are as follows:—Length, 281 feet; beam, 57 feet at the water-line with normal draught; mean draught, 19 feet 6 inches, with a displacement of 6,590 tons. Protection is afforded by a complete water-line belt, 18 inches thick amidships, tapering to 9·8 inches at the bow and stern; the armoured deck varies from 2·7 inches to 4 inches in thickness, and from it rise to the height of the upper-deck two barbettes with 16-inch armour, one forward and one aft, which protect the base of the turrets and the ammunition tubes; the two turrets are revolving, and in each is mounted a 34-centimetre (13·39-in.) 42-calibre gun, the thickness of the armour being 18 inches, each gun having an arc of training of 270°; in each corner of the superstructure is a 10-centimetre (3·9-in.) quick-firing gun in a small casemate protected by 3-inch hardened steel armour, which allows of an arc of training of 155°; and there are also four 3-pounder and ten 15-pounder quick-firing guns with four torpedo tubes. There is one military mast, and a 3-inch conning tower, which, however, only protects a man as high as his breast; Unlike the four ships of the "Fulminant" type there are no armoured transverse bulkheads, but the turret and belt armour is 4·5 inches thicker than in the earlier ships; on the other hand the armour is 2 inches less than in the four ships of the



"Cäiman" class. The engines are designed to develop 7,500 indicated horse-power with natural draught, giving a speed of 16 knots with 110 revolutions of the screws; and 8,400 indicated horse-power under forced draught, giving a speed of 17 knots, with a consumption of coal of 250 kilogrammes for a square metre of grate surface. On the official trial on the 20th October last year, an indicated horse-power of 9,250 was obtained under forced draught, being 850 horse-power over the contract; but the mean speed was only 16·7 knots instead of the 17 knots which was expected. On the official 24 hours' run, however, which took place on 3rd-4th of this month, it is reported that a maximum speed of 18 knots was attained.

There are sixteen boilers in eight groups on the Lagrafel and D'Allest multi-tubular systems in two separate stokeholds, which afford 60 square metres of grate surface and 1,960 square metres of heating surface. The ship was constructed at St. Lazaire in the "Chantiers de la Loire."—*Le Yacht*.

In last month's French Naval Notes we regret a misprint occurred in the description of the armament of the new second class cruiser E<sup>1</sup>; it should read "ten 10-c.m. (3·9-in.) quick-firing guns," and not "4-c.m. (3·9 in.)" as was printed.

GERMANY.—The following are the principal promotions and appointments which have been made:—To Kapitän zur See, Korvetten-Kapitän Lavaud. Kapitän zur See—Oscar von Schuchmann to "Baden." Korvetten-Kapitän—Siegel to be Naval Attaché at Paris; von Gehrman as Director of the Naval-Telegraphic School at Lehe.—*Marine Verordnungsblatt*.

The keel of the new battle-ship (to replace the "Preussen") will shortly be laid at the Wilhelmshaven dockyard, as her plans are now nearly completed; the engines are also to be constructed at the dockyard, with the exception of the screw-shafts, which will probably be furnished by Krupp. The new vessel will on the whole be identical with the vessels of the "Kurfürst Friedrich Wilhelm" type; but there will be some modifications and some improvements, as the result of the trials of the latter, all of which are now in commission. Harveyized armour is to be substituted for nickel-steel, which will materially increase the cost of the ship. A round sum of 20,000,000 marks is the present estimate for her, of which 14,120,000 marks are for the ship herself (including her trial trips), 5,000,000 marks for her armament of heavy guns, and 512,000 marks for her torpedo equipment. The time allowed for her construction is four years.

An important change in the composition of the Manœuvre Squadron is to be carried out before the ships reassemble in the spring. The four ships of the "Sachsen" class, viz., the "Sachsen," "Baden," "Baiern," and "Württemberg," which form the second division under the command of Rear-Admiral Barandon, are to be paid off and their places taken by the "König Wilhelm" (as flagship), "Kaiser," "Oldenburg," and one of the new fourth class coast-defence armoured ships of the "Siegfried" class. The "Sachsen," "Baden," "Baiern," and "Württemberg," of which the "Sachsen" and "Baiern" were launched in 1880 from the Imperial dockyard at Kiel, and the "Baden" and "Württemberg" in 1877 and 1878 from the Vulcan Yard at Stettin respectively, are now to be thoroughly overhauled and their engines and boilers to be replaced by new ones of a modern type. It is intended that the work shall be completed in three years, and the cost of each ship is estimated at 1,560,000 marks. The whole cost, including the trial trips of all four ships, is fixed at 6,560,000 marks. The work is to be carried out at Kiel and Wilhelmshaven. The "Kaiser" has had her masts removed and two military masts substituted, while both she and the "Oldenburg" have received a new secondary armament of quick-firing guns. As the second division will thus be composed of four ships of quite different types, it is proposed to press on the work of modernising the "Sachsen" and her three sisters, so as

soon as possible to reconstitute the second division again with ships which, being similar, will form an homogeneous squadron.—*Neue Preussische Kreuz Zeitung*.

The Budget for 1895-96 shows a further progress towards the completion of the building programme formulated in 1888-89, but in view of the fact that up to the present the *Reichstag* has refused every year to vote the credits demanded by the Government, it is impossible as yet to say how far the Ministry of Marine will be able to carry out its proposals. There has been one important modification in the programme this year: in lieu of the two protected cruisers, or cruiser-corvettes, designated "L." and "P," and the vessel to replace the "Freyta," condemned, it is now proposed to build a first class armoured cruiser (in place of the "Leipsig," condemned)—the first of the class which the German Navy will possess—and three protected cruisers of the second class, for which a first vote of 7,000,000 marks is demanded. The new first class cruiser, although she will not be able to rival either the "Terrible" or the "Rossia," will still be a powerful vessel of between 7,500 and 9,000 tons; she will have side armour and an armoured deck, and it is proposed that she shall be armed entirely with quick-firing guns. The three second class cruisers will be improvements on the "Gefion" class, and will also have an armament of quick-firing guns. The new Division Torpedo-boat will have a displacement of about 150 tons, and eight *torpilleurs-de-haute-mer* are also to be laid down; for these vessels a sum of 2,900,000 marks is demanded, making a gross total for new constructions of 9,900,000 marks.

A new basin for torpedo boats is to be constructed inside the entrance of the new canal between the Baltic and North Sea, which will supersede the present torpedo-boat basin at Kiel. The new fourth class coast-defence armoured ship "Heimdall" has been transferred from the North Sea Division to the Baltic.

A further sum of 307,319 marks is demanded for the re-armament of torpedo boats with 50-millimetre quick-firing guns, and the mounting on board also of 8-millimetre machine guns. The Ordinary Estimates amount to 23,025,050 marks, being an increase of four million marks over last year. The Extraordinary Estimates amount to 7,342,800 marks, showing an increase of 3,111,600 marks, and include credit for the construction of a large building slip at Kiel, and a subsidy to the town of Bremen for the construction of a dock.—*Le Moniteur de la Flotte*.

ITALY.—The following appointments have been made:—Vice-Admirals—Racchia to Command-in-Chief of the Active Squadron; Corsi to Command-in-Chief of the 2nd Maritime Department (Naples and Tarento); Martinez placed on retired list; Magnaghi to Command-in-Chief of 1st Maritime Department (Spezia), in succession to Vice-Admiral Martinez. Rear-Admirals—Gonsalez to command of Training Squadron; Cobiانchi relieved of command of the 2nd Division of the Permanent Squadron.—*Bollettino Ufficiale*.

The appointment of Vice-Admiral Racchia to the command of the Active Squadron is only a nominal change of duty, as he was already in command of what up to the present has been called the Permanent Squadron, which, however, for the future is to be styled the Active Squadron.

On the 16th February the present Active Squadron will pass into and become the Reserve Squadron, while the Reserve Squadron on the same date will complete to their full complements, and will act for the next twelve months as the Active Squadron; the composition of the two squadrons will remain practically as given in last month's Notes, although there may be a change among the smaller vessels; but nothing official is as yet announced. It is the intention of the present Minister of Marine that the Active and Reserve Squadrons shall exchange duties in this way year by year; but the Training Squadron, which forms the 3rd Division of the Reserve Fleet, will remain constituted as at present, and be placed under the orders of whatever Admiral may command the Reserve Squadron for the time.

It is reported at Spezia that the first portion of the Naval manœuvres will take place next June off Tarento, the fleet being commanded by Admiral H.R.H. the Duke of Savoy, and that the King will be present.—*L'Italia Militare e Marina*.

The work necessary for the change of boilers in the battle-ship "Dandolo" was undertaken some time ago, and advantage was taken to effect other important alterations during the progress of this work, with a view to improve her armament and internal arrangements.

The "Dandolo," sister ship of the "Duilio," launched at Spezia in 1878, is the second in chronological order of the ships which form the nucleus of the new Italian fleet. Much advance has been made in naval matters since 1878, whence it is that the "Dandolo," regarded as a powerful ship when launched, could not be considered to-day a good battle-ship of the modern type; the strength of her hull, the condition and quality of her machinery, and the thickness of her armour protection, however—elements which ensure for the ship many years of effective service—led to a study of the best means of improving her fighting and sea-going qualities.

The principal armament of the "Dandolo" consisted of two pairs of 45-centimetre (17·7 inches) muzzle-loading guns mounted in two armoured revolving turrets, and of three 4·7-inch quick-firing guns arranged aft. The weight of this artillery, with ammunition and stores, turrets and working machinery, amounted to 1,953 tons—no inconsiderable weight, even in comparison with the weight of the ship complete at full load draught, which was 12,265 tons. The draught corresponding to this displacement was 28 feet 6 inches aft, 27 feet forward, and a mean of 27 feet 8 inches, which was not the best for the speed and flotation of the ship, so that the idea of improving the armament was connected, as a natural consequence, with the conditions of reduction and better distribution of the weights. With these objects in view, the new principal armament was established as follows:—Four 10-inch, six 6-inch quick-firing, and five 4·7-inch quick-firing guns distributed, as will be described further on.

Even a superficial comparison between the new and old armaments will show the great gain in power by the substitution of the new for the old.

The 45-centimetre gun launches a projectile weighing 2,000 lbs., having an initial velocity of 1,700 feet, which, with the maximum elevation allowed, had a range of not less than 6,500 metres; and at 1,000 metres as the mean range at which the gun would probably be used in action, could pierce 12 inches of steel armour.

On the other hand, the new 10-inch gun carries a projectile 450 lbs. in weight, having an initial velocity of more than 2,285 feet; the range at maximum elevation is not less than 13,000 metres, and the penetration at the distance already supposed for the 45-centimetre guns is equal to 17 inches of steel armour. From the facility with which the 10-inch gun can be worked, the flatter trajectory and the more rapid system of loading, the useful distance at which it could open fire may be held to be even higher than 2,000 metres. If we assume 1,500 metres as the mean range, the projectile will still possess a total energy sufficient to pierce 16·5 inches of steel armour, whilst at the same distance the 45-centimetre gun could not pierce a 12-inch plate. The data show clearly the considerable ballistic superiority of the new weapons, with which, besides the great gain in weight and in flatness of trajectory, the employment of explosive shell becomes possible, which it is not prudent to discharge from larger calibres than 10 inches.

Another most important factor is the rapidity of fire. With the four 45-centimetre guns we could reckon on four shots in ten minutes, whilst with four 10-inch guns we could discharge twenty shots in the same time, reducing by half the rapidity of fire proved experimentally possible. As a consequence of this, in place of 7,844 lbs., we can discharge 8,180 lbs. of metal in ten minutes with the new artillery, with the improved ballistic conditions already indicated, without taking

account of the weight of metal which could be discharged at the same time from the 6-inch quick-firing and 4·7-inch quick-firing guns which have been added, and which it was not possible for the ship to carry in addition to her 45-centimetre guns.

The new guns of the "Dandolo" are mounted in pairs in two revolving casemates, protected by 10-inch nickel steel armour. The casemates are situated where the turrets were originally, but since they occupy less space their centres do not correspond with the centres of the old turrets, but are placed nearer the side, so as to allow a greater field of horizontal training. The new guns have a maximum of 35° elevation and 5° depression, can be worked by hand, and the single casemates are worked by hydraulic machinery much less cumbrous than that used for turrets.

Besides the four above-mentioned guns there are, as has been said, seven 6-inch quick-firing, and five 4·7-inch quick-firing guns arranged at the extremities of the ship, that is, six 6-inch and one 4·7-inch aft, and four 4·7-inch and one 6-inch forward on a superstructure of new construction. The arrangement of these guns permits of a concentration of fire of eleven guns on either broadside, four 10-inch, four 6-inch quick-firers, and three 4·7-inch quick-firers. Suitable shields of plating are arranged to protect the forward and after guns from the flare of the fire from the heavy guns.

The arrangement of the light guns has also been somewhat altered. They consist of ten 57-millimetre, fourteen 37-millimetre, and two Maxim guns; two of the 57-millimetre are mounted in a low fighting top of new construction. The ammunition for the heavy and medium-sized guns is stored in magazines directly under their respective batteries below the protective deck, and communicating with the upper deck by large armour tubes.

As we have already remarked, besides a notable augmentation of the power and a sensible reduction in the weight of the ship, as a result of the change in her guns, many improvements in the internal arrangements have been effected.

The new revolving casemates, having a less diameter than the former turrets, their bases occupy less room in the redoubts, from which the machinery for manœuvring and loading the heavy guns has now been removed, leaving in consequence a large amount of space in the redoubts, with great advantage in the freedom and convenience with which different services of the internal economy of the ship may be carried out; for example, this gain in space has made an enlargement of the engine-room hatches possible, with much profit to the ventilation and comfort of the department below. The torpedo tubes, which were formerly forward, are now placed in the redoubt, where, besides being efficiently protected by armour, they are better placed for defending the ship on the bow and on the quarter; they are of a later type than the old tubes, and will discharge the latest 18-inch torpedoes.

The forward funnel has also been removed from its former position and placed in the centre similarly to the after one, and as the mast also had to be modified so as to retain its cylindrical form down to the step, the construction of the conning tower has been altered, it being made lighter and smaller than the old one, in order to allow a complete revolution in training to the 10-inch guns. As there is no room in the new form of mast for the various connections for transmission of orders from the bridge to the different compartments below, a suitable armoured casing has been provided for the purpose of protecting them, and also a small conning tower before the forward funnel, in which all the apparatus for transmission of orders is collected, as well as the steering wheel, compass, etc., forming a well-situated and protected post of command. The heavy davits which were fitted for the larger boats have been removed and replaced by a light mast and derrick, and finally a low and light bulwark encloses the part of the upper deck occupied by the secondary armament aft.

The old armament, as stated, weighed 1,953 tons; the new weighs only 960, so that by the change in the heavy guns and the addition of the secondary battery there is a gain of about 990 tons.

Including the other modifications mentioned, the addition of the superstructure forward, the substitution of new and larger torpedo tubes for the old ones, increase of the small artillery, and the construction of the bulwarks aft, the gain in weight on the whole is 820 tons.

As the effect of this reduction in the weights, the displacement of the ship is now 11,445 tons; draught forward, 26 feet; aft, 27 feet 6 inches; mean, 26 feet 10 inches; giving a reduction in mean draught of 1 foot 7½ inches.

We may add that the turrets and guns removed from the "Dandolo" are to be used to complete important works for coast defence.

The cost of all the alterations, including the change of boilers, may be estimated at about 4,800,000 lire; but a considerable sum is represented as a set off to this in the value of the material removed, and which will make the expenditure really less serious than that above indicated.—*Rivista Marittima*.

We are indebted to Lieutenant Stuart, of H.M.S. "Hawke," for the following description and accompanying plans of the liquid compass designed by Captain Magnaghi, of the Italian Navy, and now in general use in the Italian Fleet:—

"The Magnaghi Compass, as will be seen from the diagrams, differs very little from other liquid compasses in general use with regard to either the floating card or the automatic arrangement for keeping the liquid free from bubbles. For the compensation of semi-circular deviation, a single bundle of magnetic strips (*aa*) is used, and is sustained by a frame (*dd*) attached to the bottom of the bowl in such a manner as to be capable of moving in a vertical and also in a horizontal direction, so that it may be placed at the proper distance from the card and at the requisite angle from the direction of the ship's head.

"The magnetic strips, which may be augmented to any desired extent, are secured by screws (*bb*) to the support (*cc*), running vertically in the guide (*dd*). On one side of the guide an arbitrary scale is engraved, so that the compensator can always be replaced at the distance, which is experimentally found to produce the proper correction.

"In the lower part of the bowl a circular groove (*ee*) is cut, having a trapezoidal section, with the small side at the bottom.

"Two metallic dies are introduced into this groove through an aperture at the side, and in them are fixed the screws (*nn*) which attach the frame of the compensator to the compass bowl. A graduated circle is engraved on the surface of the bowl and around the upper part of the frame, and an index (*q*) is attached to the frame so that the compensator can be given any desired direction.

"With the arrangement as described it is clear that, by slackening the screws (*nn*), the frame carrying the compensator can be turned at pleasure, and that by tightening the screws the index on the frame can be fixed in any point whatever of the graduated circle.

"One of the chief points of interest in the compass lies in its compensation for quadrantal error, by which the necessity for large spheres or other masses of soft iron usually attached to the binnacle for this purpose is obviated.

"The compensation for quadrantal deviation is performed by means of two brass reels (*ff*), around which is wound soft iron wire. These reels are made in sizes from 4 to 8 centimetres in diameter, and in weight from 300 to 400 grammes, and are attached to the compass bowl by two brackets (*gg*) applied laterally to the bowl below the pivots of cardinal suspension.

"The brackets are fastened to the bowl by the screws (*hh*), which pass through slots in the brackets. This arrangement allows the brackets to be set at any angle up to 20°, with the normal to the fore and aft line, so that the quadrantal deviation may be compensated when the compass is placed out of the middle line

of the ship, or in any other place where the disposition of soft iron on board is not relatively symmetrical.

"The correcting reels may be fixed on the brackets at the necessary distance from the bowl by means of the screws (*mm*). With the two compensators drawn in the figure, which weigh about 500 grammes each, a quadrantal deviation up to 25° can be compensated.

"From experiments made in the Italian Hydrographic Office it appears that, however near the compensators are placed to the needles, the deviation produced is strictly quadrantal.

"Solid ferrules of soft iron of similar external shape to the wire-wound reels have been recently substituted for them, and are found to correct a larger amount of quadrantal error.

"It will be seen from the diagram that the compass card is graduated from 0° to 360°, and that quarter points are dispensed with, the markings of the compass in points being only used for such secondary purposes as noting the direction of the wind or sea."

NETHERLANDS.—The Budget proposals for the Navy for 1895 amount to a sum of 15,413,487.24 florins, being an increase of 207,648.4 florins over the estimates of last year. The expenditure is divided under different headings, as follows:—395,263.6 florins for the expenses of administration; 6,182,650 florins for the provision of material and shipbuilding in the Royal Dockyards; 5,178,447.50 florins for the *personnel*; 1,956,400.4 florins for pilot and hydrographical services, coast beacons, etc.; 1,640,717 florins for pensions, half-pay, etc.; and 60,000 florins for unforeseen expenses.

The following details are appended by the Minister of Marine:—Out of the whole sum set aside for new constructions 1,961,000 florins is to be expended on the completion of the three armoured ships "Kortenaer," "Evertsen," and "Piet Hein," and 1,450,600 florins as the first charge for the construction of three protected cruisers. In order to prove the necessity for building these last-named vessels, the Minister discusses the question of the duties which the armoured ships of the "Kortenaer" type have to carry out. Hitherto the same vessels had to be employed both for Home and East Indian service, but serious objections had been raised to this system, as it is the universal opinion that for "general service" vessels of the cruiser type are most useful. The protection of the Home coasts must be carried out by the fleet acting in concert with the land forces, and as, owing to the numerous sandbanks and generally dangerous character of the coast, it would be impossible for hostile battle-ships to remain close in shore, especially if the buoys and beacons are removed and the lights extinguished, it would be easy to protect the few available channels, and for this purpose good armour protection and a powerful armament are more necessary for ships than high speed; on the other hand, for service in Colonial waters swift cruisers must be employed.

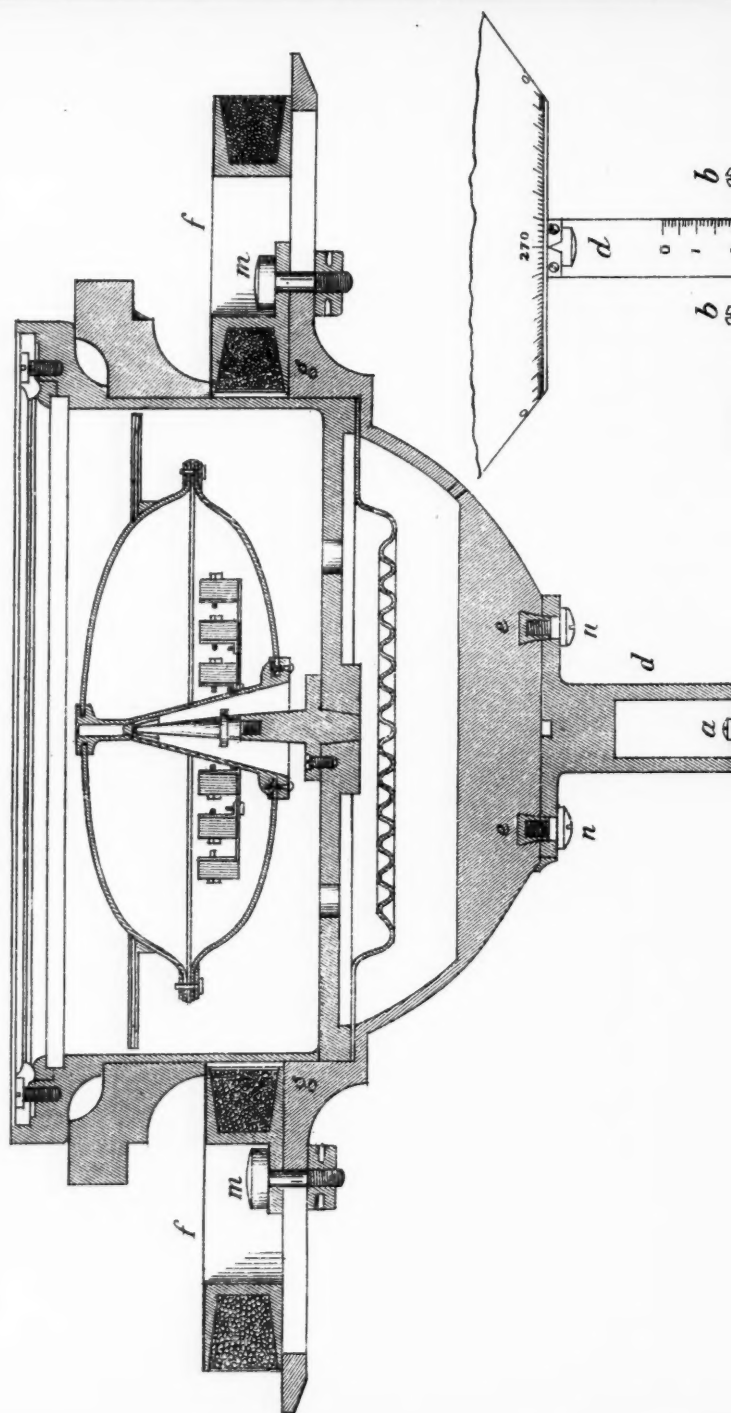
These reasons have determined the Minister to detail the three new armoured vessels for the defence of the home coasts in order that the important position off the Helder may be confided to the strongest vessels in the Navy. As soon as the "Kortenaer," "Evertsen," and "Piet Hein" are ready for service, the armoured ships, "Buffel" and "Guinea" and one of the thirteen older monitors, as well as nine gunboats which were paid off last year, will be struck off the strength of the Fleet. Although it is necessary to replace the obsolete vessels employed in Home defence, yet, in view of the number of torpedo-boats available and the approaching additions to the fleet, the Minister is of opinion that, for the time being, it is more important to provide for replacing the older ships of the auxiliary squadron.

For this service there were available on the 1st July, 1894:—The armoured ships "Koning der Nederlanden," "Prins Hendrik der Nederlanden" and "Koningin Wilhelmina der Nederlanden"; the frigates, "Johan Willens Friso," "Van Speyk," "Atjeh," "Koningin Emma der Nederlanden," "Tromp" "De

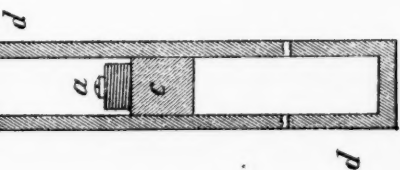




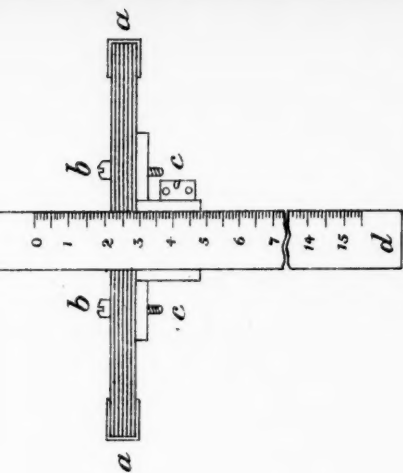
LIQUID COMPASS DESIGNED BY G. B. MAGNAGHI, CAPITANO DI VASCELLO.

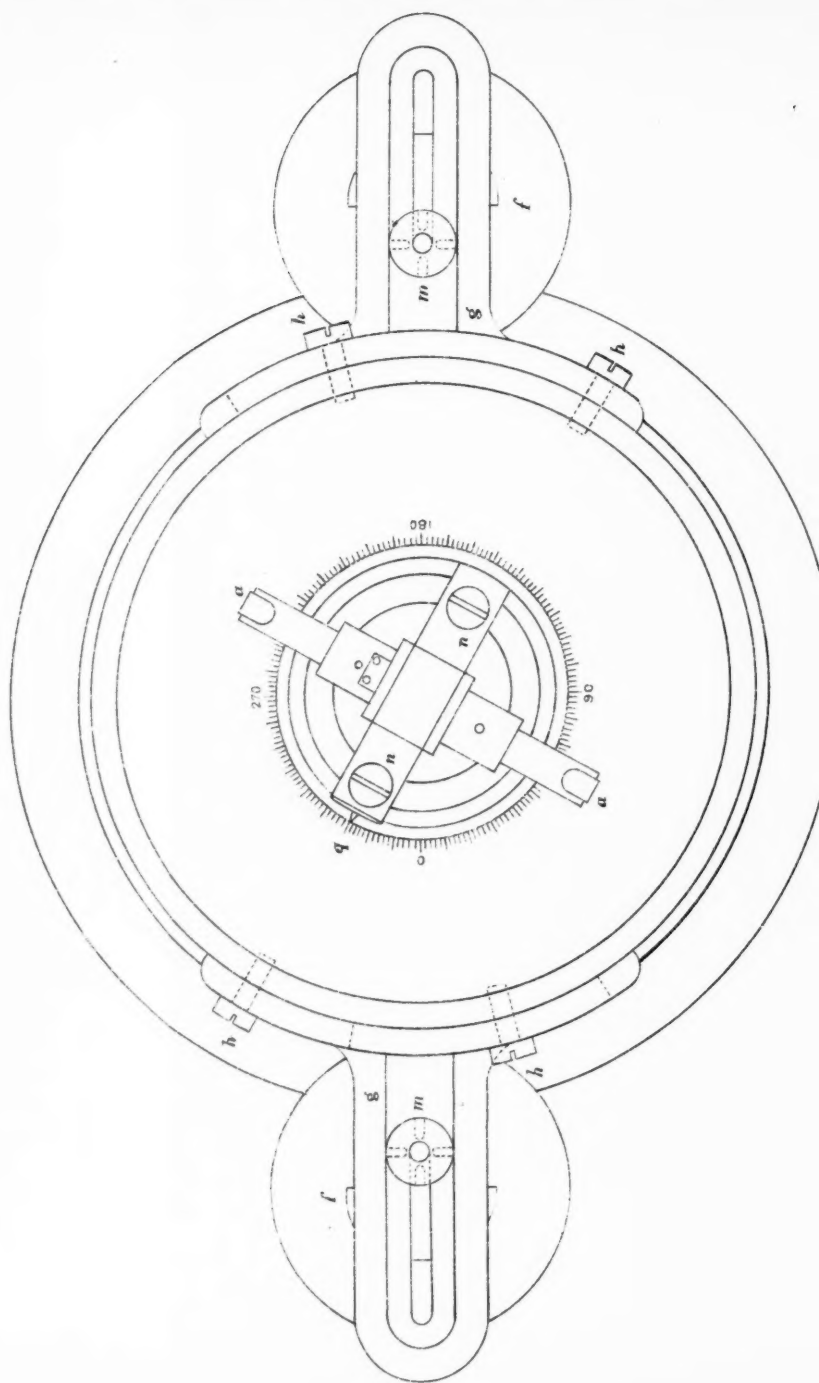






*Section*







BOTTOM PLAN.



COMPASS CARD.

COMPASS CARD.



Ruyter," and the corvette "Van Galen," out of all of which the only new one is the "Koningin Wilhelmina der Nederlanden." The remaining vessels are twenty-three and thirty years old, and, in view of their boilers being worn out and that the ships themselves and their armament are obsolete, instead of repairing them the Minister has decided on the building of the three new protected cruisers already mentioned. The new vessels will be of a class between the English "Latona" and "Astræa" types, and their dimensions will be as follows:—Length, 304 feet; beam, 46 feet; displacement, 3,900 tons; mean draught, with 400 tons of coal, 17 feet 6 inches, and with 800 tons, 18 feet 6 inches; with 400 tons of coal their radius of action at 10 knots speed will be 3,200 miles, and they are to be capable of maintaining a speed of 20 knots for five hours. The armament will consist of two 15-centimetre (5·8-in.) quick-firing guns, one forward and one aft; six 12-centimetre (4·7-inch) quick-firing guns, four 6-pounder quick-firing, and eight 1·5-pounder quick-firing guns, with four torpedo-tubes for 18-inch torpedoes, one in the bow, one astern, and one on each broadside. It is proposed to complete the new vessels in two-and-a-half years, and their cost will be 2,775,000 florins. One will be built in the Royal Dockyard at Amsterdam, and the other two in private yards.—*Mittheilungen aus dem Gebiete des Seewesens nach Marineblad.*

Last year was constituted by Royal decree a Reserve of officers and men for the fleet. The men are to be drawn from the fishing population and the merchant service, while the officers have been selected from among the most intelligent and smartest of those in the merchant marine. Captains in command of the ocean liners, who have been so selected, are empowered to fly upon their ships the naval Reserve ensign, which will be red, white, and blue, with an anchor and crown on a white field. As a mark of distinction, naval reserve officers are further authorised to wear on the collar of the uniform of the company, in whose service they are, an enamel badge with a gold anchor and crown thereon.—*Neue Preussische Kreuz Zeitung.*

RUSSIA. Rear-Admiral Alexieff has been appointed to the command of the Pacific Squadron, in succession to Vice-Admiral Tyrtoff; and Rear-Admiral Avelan has been appointed for service at the Ministry of Marine.

In last month's Notes we stated that "the two new cruisers of the improved 'Rurik' type, building at St. Petersburg, the 'Rostilav,' and 'Rossia,' are to be fitted with special furnaces," etc. A correspondent has drawn our attention to the fact that the new battleship "Cissoi Velikie" No. 2 is the "Rostilav," and that the "Rurik" No. 3 is not yet named or laid down, as the slip at the Baltic Works is not ready.

Colonel Orloff has communicated to *France Aérienne* some interesting facts, which have been collected as the result of the search for the sunken monitor "Rusalka" at the bottom of the Baltic by a captive-balloon. The detachment detailed for the work, consisting of an officer, an engineer, and twenty-five men of the Aerostatic Park at St. Petersburg, embarked on board the "Samojed," which had been specially fitted out for Balloon Service at Helsingfors. Between the 23rd June and 12th July, last year, the "Samojed" was every day towed out to sea, being brought back in the evening.

The balloon had a capacity of 640 cubic metres, and was kept at an elevation of between 200 and 400 metres. With a head wind it was towed at a rate of 2·5 knots an hour, with a fair wind 6·7 knots.

The observers were in the basket, and were relieved every three hours, and they all agreed that it was easier to see the bottom with the naked eye than when using glasses.

According to Colonel Orloff, the following results were determined:—

1st. At a greater height than 400 metres it is not possible to make out the bottom, as it cannot be distinguished from the colour of the supervening water.

2nd. When the light is favourable rocks and sandbanks lying 6—7 metres below the surface can, however, clearly be distinguished.

3rd. Large sandbanks, even when they lie at a depth below the surface of about 12 metres, are, more or less, easy to recognise, according to circumstances; but objects lying upon them cannot be made out.

4th. When the balloon, in a filled condition, was secured on deck with a sail over it, the tug was enabled to tow the balloon-vessel against a light head wind at a speed of 8 knots.

5th. The range of vision at a height of 400 metres from the basket was 75 kilometres (40·5 sea miles). If the balloon ascended at Helsingfors, Revel could be seen, report of firing there heard, and the smoke of the guns was visible.

6th. It is easier to make observations from a captive-balloon at sea than on land, as the wind currents are more regular and not so subject to sudden changes in strength and direction. Objects also show out better on the surface of the water than they do on land. A vessel coming into the field of sight is immediately observed, and there is no difficulty in deciding whether she is a ship of war, merchantman, or yacht.

From these observations Colonel Orloff draws the following conclusions:—

(a) That a captive-balloon would render invaluable services in a fleet for look-out purposes.

(b) That it can be used for reconnoitring the entrances to harbours, the position of fleets, coast fortifications, etc., and can also be made useful for hydrographical work.—*Mittheilungen aus dem Gebiete des Seewesens.*

## MILITARY.

FRANCE.—*The New Strategic Railways in France.*—When, in 1879, the then Minister for Public Works, M. de Freycinet, presented to the Chambers his far-reaching plans for railways, canals, and harbours—plans which were intended to reveal to the public the beneficent activity and capabilities of Republican Government—beyond the ordinary commercial principles on which he based his design there lay the intention to give to each army corps its own special double line of railway to the Eastern frontier.

This scheme is now approaching completion, and during the past two years the following links have been worked into the chain:—

2nd Corps.—The *Compagnie du Nord* has completed the section Rozoy-sur-Serre-Liart, which opens at the latter place into the line running east from Hirson to St. Dizier. A link yet remains to be completed from Liart to Tournes, near Mézières. When this is opened, Amiens, the headquarters of the 2nd Corps, will have through communication to the Meuse.

The “Nord” has also opened a section, Don-Templeuve, which connects the three lines: Bethune-Lille, Valenciennes-Lille, and Douai-Lille, and hence possesses great importance for the defence of Lille.

8th Corps.—The P.L.M. opened on the 1st June, 1893, the section Cosne-Clamecy; and on the 18th December, 1893, the Orleans line completed a branch from Bourges to Cosne. These two links give through double-line communication between the Atlantic and Toul and Verdun, by way of Bourges, Auxerre, St. Florentin, and Troyes. At the three latter points, where several lines converge, the through traffic threatens to be throttled; and to relieve the congestion, some relatively short sections are to be quadrupled.

9th Corps.—By the opening of the section Sargé-Vouvray (Tours), 29th July, 1894, this corps has now an independent line to the East *via* Chartres and the Paris “Ceinture” line, whilst the 18th Corps retains sole claim to the Bordeaux-Orleans line.



13th Corps.—The mobilisation of this corps will be much facilitated by the completion of the loop joining Mauriac-Vendes on the Orleans system. This forms the connecting link between Bourges and Toulouse, and, though still only a single line, shortens the distance considerably.

17th Corps.—The Orleans Company has, by the construction of a line from St. Florent to Issoudun and of a section from Limoges by Uzerche to Brive, brought the 17th Corps into direct communication with the Meuse from Montauban.

The line Carentan - Carteret forms the foundation of the defence of Cherbourg and Brittany; and the sections Albertville-Moutiers and Dié-Aspres, both on the P.L.M. system, are, as a glance at the continental Bradshaw will show, of the highest importance for the defence of the Alps.—From the *Militär Wochenblatt*. No. 4.

*Requisitioned Horses and the Reserve Cavalry Regiments.*—From the *Revue du Cercle Militaire* we extract the following :—In a paper read before the National Society for Agriculture, 8th November, 1894, M. Cagny, chief veterinary surgeon of the district of Senlis, where the horses were requisitioned, classified them as follows :—Out of the total of 450 horses taken up for the 45th Dragoons at Compiègne, 100 belonged to the light-draught type, and were only accepted because the commission had no margin of choice; 100 had been habitually employed as saddle horses, and the remaining 250 were draught horses of different types, which for the most part had never been mounted.

By common consent of all who saw them these horses executed without disorder the various movements required of them as troopers in the ranks. As regards their condition; they left their garrisons for Amiens (the manœuvre district) on the 13th October, and for twelve days did the regular work of the service, being cantoned in the villages for the night. On the day of the inspection they were under the saddle from 6 a.m. to 4 p.m., and on the following day they marched back to their quarters, averaging twenty-two miles. They were carefully inspected on their return, and were in brisk condition, without sore backs. They had grown thinner, but their muscles were firm, and if they looked "tucked up" it was the fault of their diet.

Out of sixty-eight horses the claims for depreciation were covered by 500 francs.

The veterinary surgeon for the district of Limoges, where the 61st Chasseurs à Cheval was raised, reports almost in the same terms :—"On the whole the requisitioned horses were suitable for saddle work. They had not the uniformity of the service trooper, and many were under the regulation height and somewhat used up. This was principally due to the fact that the owners, notably the dwellers in the cities, had hired anything they could lay hands on and substituted them for their own animals.

"However, all did their work fairly well, and if the proprietors would take their part of the contract seriously, a few weeks would suffice to make all fit for the field."

GERMANY.—*Alteration in the Method of Carrying Carbines.*—By order dated the 10th January, 1895, the Prussian Cavalry will in future carry the carbine behind the right thigh, the bucket being attached to the saddle as in the British service. The sword also is to be carried on the saddle behind the left thigh.

The carbine was formerly carried in front of the rider, projecting backwards across the right thigh. This method was tested in England many years ago by the British Cavalry and condemned, as the consequence of a fall was almost invariably a broken thigh for the rider.

*New Repeating Pistol.*—The firm of Ludwig Löwe and Co. is turning out a repeating pistol, Borchardt's patent. Eight cartridges are carried in the magazine, the bore is 7.65 millimetres, and the range is stated to be 500 metres.

Without personal inspection it is difficult to express an opinion on the value of this new weapon. It may, however, be pointed out that its shooting should be more regular than that of a revolver, owing to absence of escape of gas between the chamber and barrel; and also, being much flatter, it should be more convenient to carry.

*ITALY.—Recruiting Operations.*—For the first time for many years the recruits have been called up in December instead of in March. This year's contingent consists of the first category of 1874, and of those of 1873 put back on furlough, but at the call of the recruiting commission, further of all those passed over in former years on grounds of health, or as students, but who have now completed their studies. Part of the 1874 contingent will only serve two years.—*L'Esercito Italiano*, 12th July, 1894.

*Experiments with Compressed Forage.*—Experiments with forage compressed to one-eighth of its normal bulk are being carried out in Milan. Thirty horses in the artillery and cavalry are to be fed on it exclusively for six months. The forage is supplied by Luzzatto and Co.—*L'Italia Militare*, 15th May, 1894.

*RUSSIA.—Formation of Two New Regiments of Field Howitzers.*—By an Imperial order of the 4th November, 1894, two new regiments of howitzers are to be formed and to be ready for the field by the 1st October of this year.

Each regiment to consist of two batteries, and to bear the numbers 6 and 7. Of the existing regiments Nos. 1 to 3 consist of four batteries each, Nos. 4 and 5 of two only. The Field Artillery of Russia will, therefore, contain by the autumn of next year twenty howitzer batteries, each of six howitzers, eighteen ammunition wagons, and twelve other wagons.—*Revue d'Artillerie*, January, 1895.

By decree dated 1st and 13th December, 1894, each Don Cossack Regiment will be augmented by one squadron.

*Withdrawal of General Gourko.*—The importance of the news of the withdrawal of General Gourko from the chief command of the Warsaw district has been much discounted by the knowledge possessed in all intelligence departments of his complete physical breakdown. Under his eyes the troops at his disposal have been welded into an homogeneous force, with a higher degree of fighting efficiency than perhaps any army Russia ever possessed, and with him at their head they were felt by their immediate neighbours to constitute a standing menace to their nightly rest. His successor is not considered to be such a danger to peace, and the Austrian papers seem to breathe a note of relief in recording the appointment. At the present moment the troops in the command are distributed in the three following groups:—On the German frontier, 49,000 men; on the Austro-Hungarian, 47,200 men; between the two around Warsaw, 52,000 men. Full details are given in the "*Reichswehr*," 31st December, 1894, which adds the important piece of information that for the present the orders for the troops yet needed for the completion of the westward concentration have been cancelled.

*Winter Manœuvres.*—Before resigning his command, General Gourko issued orders which point to a still further extension of the system of winter manœuvres he was the first to initiate. All troops are to be trained in marching, field-firing, and tactical operations, the latter to include a two-days' exercise, involving a night's bivouac; and by the end of the season the infantry must be in condition to march at least twenty miles without unusual fatigue. To increase the readiness of the cavalry for active service, the shoes of the horses are not to be removed, except for the purpose of replacing them.

SWITZERLAND.—*Discipline in the Swiss Army.*—Whilst the German Socialists are clamouring for a Militia Army, and pointing to Switzerland as a practical demonstration of the soundness of their contention, the professional soldiers of the Swiss Army are far from sharing their views. For years past, indeed, these latter have been under no illusions as to the fighting value of their commands; and whilst still of opinion that, for the money and time bestowed on it, the Swiss organisation is the most complete and effective in the world, they thoroughly realise how very far short of the standard attained by their neighbours they yet remain.

As a consequence of some serious infractions of discipline which occurred last year, one of these officers, Major Gertsch, of the General Staff, has recently published a pamphlet with the title "Discipline or Disarmament," in which he lays bare, in the most ruthless fashion, the weaknesses and failings inseparable, we believe, from any Militia or Volunteer organisation for the training of troops which it is intended shall always be ready for mobilisation and war.

This pamphlet raised a storm of indignation in the Press, as it would have done in our own; and Colonel Wille, commanding the Swiss cavalry, was appealed to, to contradict, or at least explain away, the Major's indictment. This he altogether refused to do; but, on the contrary, he stated that Major Gertsch had spoken the whole truth, and the indignation he had aroused was only due to the disinclination of the country to look hard facts in the face.

The whole pamphlet is far too long for reproduction here; moreover, as long as our fleets hold the sea, immediate readiness for war is not required either for our Militia or Volunteers; but, should they fail us, then every word that Major Gertsch has written would be found equally applicable to our own situation. We would earnestly recommend all who believe in the value of the good-natured tolerance of restriction that obtains in our auxiliary forces, as a substitute under fire for the discipline acquired by continuous service under professional officers, to read this pamphlet with the closest attention; and if they are inclined to think that the author's words apply only to his own countrymen, let them look up the history of Bull's Run and other early engagements of the American Civil War for confirmation of his accurate judgment.

TURKEY. According to the "*Reichswehr*," the Remount Commissions sent to both Russia and Hungary to purchase horses for the new howitzer batteries have hitherto been unsuccessful, notwithstanding that they had been accorded, since their departure, permission to bid up to current market prices, and even above them. This failure is attributed to want of local knowledge, and the advanced season of the year. The new batteries appeared to have every prospect of remaining immobile for an indefinite period, when suddenly a "*deus ex machina*," in the shape of a Russian contractor, appeared, and by invoking diplomatic support succeeded, in a few days, in obtaining for himself an exceedingly lucrative concession. By the terms of this contract 920 Artillery horses between three and seven years of age, minimum height 153 centimetres, say 14'2 hands, are to be delivered within six months. The 82 howitzers (12 centimetres) intended for these batteries are on their way from Krupp's.

## FOREIGN PERIODICALS.

### NAVAL.

AUSTRIA-HUNGARY.—*Mittheilungen aus dem Gebiete des Seewesens*.—Pola and Vienna: No. 2. February, 1895.—“H.L.M.S. ‘Kaiserin und Königin,’ ‘Maria-Theresia’” (with plate). “The English Naval Manœuvres, 1894.” “The French Naval Manœuvres, 1894.” “A Method of Determining an Astronomical Point Without Logarithm Tables.” “Translation of Lieutenant Calthorpe’s Naval Prize Essay” (conclusion). “The Defensive Works of Taranto.” “The Corinth Ship Canal.” “The Italian Battle-ship ‘Re Umberto’” (with plans). “Naval Notes: England, France, Portugal, and Brazil.” “Notices of Books.”

*Die Reichswehr*.—No. 722. Vienna: January, 1895.—“On the Paramount Treatment of the Imperial Navy.” 27th January. No. 725. “On the Tactics for an Artillery Duel at Sea, arising out of Technical Improvements.”

DENMARK.—*Tidskrift for Søvæsen*.—No. 6. Copenhagen: “Some Remarks about the sum voted for Fitting-out Ships, and the Way it is Expended.” “The Naval War in East-Asia.” “Some Remarks on the Education of Naval Officers.” “New Search-lights with Parabolic Reflectors.” “Barr’s and Stroud’s Ranglefinder for use on Board Ships.” “The School for Naval Gunnery.”

FRANCE.—*Revue Maritime et Coloniale*.—Paris: December, 1894.—“Our Commerce and our Countrymen in the Atlantic Ports” (Rear-Admiral de Libran). “Influence of Sea-power on History” (translation of Captain Mahan’s work continued). “The Mission to the Upper Mekong, Report of the Voyage of the ‘Massie,’ and ‘Kammarat’” (G. Simon, Lieutenant de Vaisseau). “Chronicle of the Port of Lorient, 1803 to 1809.” “Description and Working of the Hydraulic Machinery for the 34-centimetre (13.39-inch) Turret Guns in ‘Jemmapes,’ ‘Valmy,’ etc.” “Vocabulary of Powders and Explosives.” “Naval Chronicle: England, Germany, Argentine Republic, United States.” “English and French Auxiliary Cruisers.” “The Sea Fisheries.” “Notices of Books.”

*Le Yacht*.—Paris: 5th January, 1895.—“The War-Navies in 1894” (E. Weyl). “The Collision between the ‘Valkyrie’ and ‘Satanita.’” “The new Coast-defence Battle-ship ‘Jemmapes’” (with plate). “Electricity, Incandescent Lights and Electric Installations on Board Yachts.” “The River Flotilla for Madagascar.” “Yachting News.” “Light Armour.” “Naval Chronicle, Home and Foreign.” 12th January.—“The War-Navies in 1894” (E. Weyl) (concluded). “Yachting News.” “The new second class Cruiser ‘Friant’” (with plate). “The America-Cup.” “The Last of the ‘Desaix,’ the old imperial yacht ‘Jérôme-Napoleon.’” “Naval Chronicle, Home and Foreign.” 19th January.—“The new President.” “The Trials of Ships of War” (E. Weyl). “On Light Armour.” “The Dockyards and new Constructions in France at the Commencement of 1895.” “Yachting News.” “The River Flotilla for Madagascar.” “Naval Chronicle, Home and Foreign.” 26th January.—“The Ministry of M. Félix Faure” (E. Weyl). “Yachting News.” “Technical Marine Association.” “The Gunboats for Madagascar” (with plate). “The Italian Battle-ship ‘Sardegna’” (with plate and profile and deck plans). “Naval Chronicle, Home and Foreign.”

*Le Moniteur de la Flotte*.—Paris: 6th January, 1894.—“Coaling and Supply Stations” (Marc Landry). “Colonial Notes.” “Naval Chronicle, Home and Foreign.” “Book Notices.” 12th January.—“Brueys at Aboukir” (Marc Landry). “The French Fishermen.” “The Navy in Parliament.” “Naval Chronicle, Home and Foreign.” “Book Notices.” 19th January.—“The

German Navy" (Marc Landry). "The Extra-Parliamentary Enquiry into the Navy." "North-Pole Expeditions." "Naval Chronicle, Home and Foreign." 26th January. — "The new President of the Republic" (Marc Landry). "Colonial Notes." "Naval Chronicle, Home and Foreign."

*La Marine de France.* Paris: 10th January. — "Apropos of the 'Brennus'" (Rear-Admiral Réveillère). "The Crisis in our Shipbuilding." "Naval Chronicle: Home and Foreign." "Yachting Intelligence." "The Subsidised Mail Services." "The Question of Newfoundland." "The Merchant Navy." "Geographical and Colonial Movements." 25th January. — "Submarine Cables and the Navy." "The Legion of Honour: Commands and Promotions." "Naval Chronicle: Home and Foreign." "The Subsidised Mail Services." "The Question of Newfoundland." "Yachting News." "Geographical and Colonial Movements." "Book Notices."

GERMANY. — *Marine Rundschau.* Berlin: January, 1895. — "The Naval Expedition against Morocco, 1852." "Translation of Lieutenant Calthorpe's Naval Prize Essay" (*concluded*). "Precautions for the Prevention of Accidents to Machinery and for the Protection of Engineers and Stokers against Scalding by Steam." "Naval Chronicle: England, France, and United States." "Promotions and Appointments." "Book Notices."

ITALY. — *Rassegna Navale.* Rome: Nos. 8-10. — "Calculation of the Latitude by the Altitude of Three Stars or the Altitude of a Single Star, whose declination does not materially change." "The Working of Screws." "Electric Lighting on Board Ship." "New Nautical Instruments."

*Rivista Marittima.* Rome: January, 1895. — "The Condition of the Italian Mercantile Marine" (Dr. A. Teso). "On the Solution of the Problems of Orthodromic Navigation, with special regard to the new edition of Gnostic Charts." "The Yachting Navy in 1894." "More about the Naval Battle off the Yalu" (C. Avallone). "Explosive Mixtures in Boilers" (L. Perroni). "The Madagascar Question." "Letters to the Director: 'On the Defence of our Maritime Frontier.' "Emigration and Naval Hygiene." "Naval Chronicle: Brazil, Construction of Cruisers and Battle-ships; France, the Building Programme in the Budget for 1895, Trials and Defects of the 'Chasseloup-Laubat,' 'Latouche Tréville,' 'Fleurus,' etc.; Germany, Building Programme for 1895; England, Construction of New Cruisers, Launch of 'Magnificent,' etc.; Italy, Alteration of the 'Dandolo'; Portugal; Russia; United States, Proposed New Ships, etc., Plate of Dynamite Gunboat 'Vesuvius.'" "Notices of Books."

SPAIN. — *Revista General de Marina.* Madrid: January, 1895. — "An Account of the Hurricane of the 24th September, 1894, in the Antilles." "Remarks on a Method of Representing Graphically the Potentials of Action." "Some Fresh Remarks on the Combat off the Yalu." "Succour to the Wounded and Shipwrecked in Maritime Wars." "The Manœuvres of the Spanish Torpedo-boats in 1894." "The Currents of the Gulf." "Origin of Ocean Currents." "The method of the careening of Ships on the Horizontal Gridiron at the Arsenal of Cartagena, and of the cruiser 'Lepanto.'" "Vocabulary of Powders and Modern Explosives."

SWEDEN. — *Tidskrift i Sjöväsendet.* Carlscrona: Nos. 5-6, 1894. — "How can we best utilise for the Fleet the Advantages obtained from the increased length of Service and Training of the Seamen" (*conclusion*). "Some Remarks on Canet's Quick-firing Guns." "On Search-lights." "On the Trial of Glasses for use at Sea." "The Italian Torpedo-boat Manœuvres in 1893." "Events in Rio, and End of the Brazilian Insurrection." "The Naval Battle off the Yalu." "The Torpedo-boat Attack at Santa Catherina."

## MILITARY.

AUSTRIA.—*Die Reichswehr*. 31st December, 1894.—"1895," customary New Year's article; contains a valuable summary of the progress of Russian concentration in the Polish provinces. 4th January, 1895.—"Comments on the Military Statistical Year Book for 1893"; runs through three numbers, and deserves study. 9th January.—"Military Sketches from the Bosphorous," by Hassan Ahmed; worth reading. "Notes from St. Petersburg"; always interesting. The new smokeless powder is ordered to be most carefully sheltered from the sun's rays. 11th January.—"Notes from Constantinople." "Purchase of Horses in Russia." "The Russian War Indemnity." "The New Howitzers from Krupp." 13th January.—"A Noble Deed"; leader on the fortieth anniversary of the Imperial edict abolishing corporal punishment in the army, a step attended with the best results to the status and discipline of the services. "Small Calibres and Gunshot Wounds," on a lecture by Dr. Habert; nothing new. "From Constantinople"; description of the Russian scientific expedition for Abyssinia leaving the Bosphorous. 18th January.—"A Solemn Warning," *apropos* of the resignation of the French President; contains matter for serious reflection. "The Army is the only guarantee for the security of the State, whether as against external or interior enemies." "The Reorganisation of the Ordnance Store Department." "Notes from Constantinople"; notices the publication of several new Turkish military works, "which would reflect credit on any European army." 20th January.—"A Constitutional Prerogative of the Monarch." 27th January.—"How they Economise in the Imperial Navy." "Notes from China." 30th January.—"The First Cavalry Encounters in the next War"; read. "Education *versus* Drill in the Soldier's Training." "Roumanian and Servian Officers."

FRANCE.—*L'Avenir Militaire*.—"The Pillars of the Army," founded on an article in the *Journal des Sciences Militaires*, and signed "Un Officier Supérieur"; an able *résumé* of the conditions under which the young officers enter the French Army; fairly and temperately worded; both the original and this notice should be studied. 8th January.—"Military Degradation," a well-deserved reprimand to the Reserve Officers who hooted Dreyfus. 15th January.—"Schools for N.C.O.'s in France and Germany," insisting on the necessity of doubling the existing schools in France. "How we Colonise," comparison of English and French methods; in one French colonial town there are 150 officials to 30 Europeans. "The Embarkation for Madagascar"; recalls, without comment, the embarkation for Mexico in 1863. 18th January.—"The President, Cassimir Perier." "The President, Félix Faure." "Revision of the Code of Military Law." "The Decree of the 13th January on the promotion of officers." 22nd January.—"The Staff College"; a fearless outspoken article, calling attention to the grave defects existing in the mechanism of the institution which passed a man like Dreyfus into the Staff. "Bands for the regiments in Madagascar"; it appears that the troops embarking for Madagascar take no bands with them. "A Legacy"; General Mercier's last decree recommending the reduction of the age limit for promotion in the junior ranks of the army; worth reading. 29th January.—"The Occupations of Positions on the Defensive"; review of a work by Captain de Morainville; favourable; the author appears to base his ideas primarily on Wellington's Peninsula practice. "Discipline in Continental Armies"; discusses the punishment of 174 N.C.O.'s in Berlin and the 53 death sentences in the French Army in 1893. The whole issue contains details of the coming expedition to Madagascar, and the usual reports on the debates in the Chambers on army matters.

*Revue du Cercle Militaire*. No. 1.—"The Reserve Cavalry and the Requisitioned Horses"; an exceedingly interesting summary of the reports on the recent experiment of mobilising two cavalry regiments in their own districts. General conclusion—that the horses did their work, but no more. "The Cuirass Loris." Account of experiments with the Loris bullet-proof cuirass. It appears to

have stopped all service projectiles, and the *Revue* seems to think it will revolutionise tactics—an opinion we do not share. No. 2.—“Squads of Instruction in the Field Artillery”; useful for those specially interested in the French army and its methods. “The Fundamental Principles of Photography”; contains nothing new. No. 3.—The same subjects continued; “The War Against the Touareg.” No. 4.—“Statistical Statement of the numbers of members of the Cercle Militaire.” Total, 10,433. Notes on the preparations of the Madagascar Expedition, etc.

*Revue Militaire Suisse.* 15th January.—“Musketry Instruction in the Infantry.” “Mountain Artillery in 1894.” “Hygiene and Feeding of Horses on Field Service,” by Veterinary-Captain Volet. “Moltke,” review of W. O’C. Morris’s work.

*Revue d’Artillerie.* January.—“Artillery in the Action off the Mouth of the Yalu”; nothing new. “Plates and Projectiles”; state of the question in January, 1895. E. Vallier. “Distribution of Deformations in Metals under Strains and Compressions.” The illustrations will render this important matter clear even to unscientific readers. “The Exhibit of Guns and Artillery Material, by Krupp, in the Chicago Exhibition,” C. Benoit; an interesting summary, much of it derived from *Engineering*. “The Influence of the Pitch of the Screw Threads in the Breech Actions of Modern Guns,” by P. Laurent, engineer of the Société des Forges et Chantiers de la Méditerranée; highly scientific, with full calculations.

*Le Spectateur Militaire.* 15th January.—“Two Years’ Service,” by L. Brun, *apropos* of the new Bill now being discussed by the Military Commission previous to submission to the Chambers; interesting to compare with the views and line of thought adopted by the Germans under the same circumstances. “Les Bourcet, and their Services to Alpine Topography”; continued from last month. “The Old Army: its Bases of Organisation,” by C. Boissonnet. “After the Degradation,” a sensible note; the *Spectateur* inquires, How was it possible that an officer thus under suspicion attained the position of trust he occupied? The answer is given in an exceedingly valuable letter in *L’Avenir Militaire* of the 22nd January.

GERMANY.—*Militär Wochenblatt.* No. 1.—“The New Field Service Regulations.” “The Training and Leading of Cavalry”; review of a book by Lieut.-General Pelet-Narbonne. According to the *Militär Wochenblatt* one of the most important works on the subject yet published; we hope to review it at length in a future number. “The Artillery at the Manœuvres”; a practical article, calling attention to the growing tendency to sacrifice fire effect to concealment. No. 2.—“The New Field Service Regulations” (*conclusion*); a careful study, well worth reading. “The Training and Leading of Cavalry” (*continued*). No. 3.—“The Fire Regulations for the Russian Field Artillery”; read. “Life of General Carl von Grolman”; further review. “The Training and Leading of Cavalry” (*continued*). No. 4.—“The Fire Regulations for the Russian Field Artillery” (*continued*). “The Training and Leading of Cavalry”; this article deals with General Pelet-Narbonne’s views on the drill of the cavalry division, which may be summarised in the following quotation: “Under General von Schmidt, a division used to work like a well-drilled squadron under a first-class leader”; no manœuvring is possible in action till this degree of precision has been attained. His ultimate conclusion is that the cavalry divisions must exist as permanent bodies in time of peace.” “The Tactics of Guns of Position in the Field”; not to take part in the artillery duel, but to be held in hand to prepare the final assault of the infantry. “Recent Additions to the French Railway System.” No. 5.—“The German Cavalry in 1870-71”; review of Major Kunz’s new work; very favourable. “The Mobility of Field Artillery”; lays down the conditions it has to fulfil, and discusses the training of horses and drivers to attain those ends; well worth study. “The Shrapnel Fire of Field Artillery”; review of a work by Major-General von



Rohne; favourable. No. 6.—“The Mobility of Field Artillery” (*continued*). “Grain and its Importance for the Feeding and Provisioning of an Army”; review of a publication by the Prussian War Ministry. “Latest Changes in the Italian Army.” No. 7.—“Militia Armies”; their dark side, based on a pamphlet by an officer of the Swiss Army entitled “Discipline or Disarmament.” “Unity in the Infantry Attack”; remarks founded on General von Scherff’s recent works on Colombey-Nouilly and Vionville-Mars la Tour; tone of the article against any normal formation. No. 7.—“Frederic the Great and the Origin of the Seven Years’ War”; review of a new work by the well-known author, Max Lehman. “Away with all Normal Attacks”; further polemical discussion on von Scherff’s views; both parties appear to be fighting with windmills. “Principles of Equitation and the Training of Young Horses”; reply by Mr. James Fillis to Mr. Plinzner, in which the former has altogether the best of the argument. Mr. Plinzner, the Emperor’s chief equerry, declined to witness Mr. Fillis’s demonstrations in Berlin in 1893, and equally declined to invite Mr. Fillis to see his own. We enjoyed the advantage of watching both, and also of consulting many of the first experts on equitation in the country. Both in their opinion and ours, Mr. Fillis’s methods were, for all practical purposes, far in advance of any others, an opinion in which Captain Hayes also appears to agree (*vide* “Men and Horses”). No. 9 contains only the “Gazette” for the month; this must be disappointing to casual purchasers. No. 10.—“Changes in Organisation in the Russian Army”; a complete list of the Russian Corps up to date.

*Deutsche Heeres-Zeitung*.—No. 1.—“Frederic the Great”; Review of a book by Professor Koser, a former pupil of the well-known historian, Droysen; very favourable. “Field Fortification and Tactics”; a thoughtful article, well worth reading; continued in No. 2. No. 3.—“The Military Training of the Board School Teachers.” The teachers claim that their present training is insufficient to give them that thorough soldierly feeling and sense of discipline which they, of all others, most require in order to perform their part in the education of their pupils in those principles of loyalty and self-devotion that constitute the true fighting strength of a nation. “Train hand and eye for the Fatherland”; a proposal to use miniature figure targets to accustom the eye to the true appearance of objects at fighting ranges, in galleries, and on the barrack square, the idea being the same as the Morris system. No. 4.—“German Officers from a Russian point of view”; an able précis and criticism of an article in the *Wajonny Sbornik*, signed K-n. No. 5.—“German Water-ways”; summary review of the internal water communications of the country and their importance in war. “Strategical and Tactical Retrospect of the Action at Blumenau-Pressburg, 22nd July, 1866”; runs through the next four numbers. No. 6.—“The French Army Estimates,” from *L’Avenir Militaire*. No. 7.—“The German Cavalry in the Battles and Combats of the War of 1870”; review of a new work by Major Kunz. No. 8.—“The Question of Military Attachés.” No. 9.—“The Emperor’s Address to the Army, 27th January, 1895.” “The Pioneer Handbook for the Infantry.”

*Jahrbücher für die deutsche Armee und Marine*. February. —“Friedrich von Hellwig and his Raids”; a study in partisan warfare, 1792-1814 (*continued*), by von Hans Fabricius, Lieut-Colonel a.D. “Improvised Fortifications”; an historical study, by Reinhold Wagner, Lieut-Colonel a.D. “The British Naval Manœuvres,” by Von Klein, Captain a.D. “Reports and their Circulation in Cavalry Field Service,” by Von Junk, Captain a.D.; a very thorough and interesting study on the transmission of orders and information. “Some Notes on the New Edition of the Field Service Regulations, 1894”; worth reading. “The effect of Field Artillery Fire from 1815-1892”; review of a new work by Lieut-Colonel Müller, well known by his work the “Evolution of Field Artillery.” “Notes from Russia,” contains personal note on General Dragomirow; very characteristic. Book Notices, etc.



UNITED STATES OF AMERICA.—*Journal of the Military Service Institution*. January.—“The Military Academy,” by Lieutenant Hubbard. “Reform in the Quartermaster’s Department,” by Lieutenant Palmer. “Physical Training in the British Army,” by Lieut-Colonel Woodhull, Deputy Surgeon-General; an interesting paper, the conclusion expressed being very favourable to our system. “Ne bis in idem,” by Captain Sharpe, on the liability of a soldier to be tried by a civil court after being already tried by a military one. “Artillery Practice at Shoeburyness.” Notes by an American visitor, who appears to have been very favourably impressed. “Thoughts on Methods of Attack,” by Brigadier-General Hardin, contains some interesting notes of personal experience in the Civil War. “Principles and Practice of Saddling” agrees with our own practice, by J. Treacy. “Field Music.” “Sympathetic Explosions”—reprinted from *Knowledge*—on the power of air-waves induced by concussion, to determine the explosions of neighbouring stores of ammunition. “The War between China and Japan,” collated from various sources. Histories: “The First Regiment of Cavalry.” “The First Regiment of Infantry.” Both these regiments took part in the Civil War, and their records are well worth study. Both might well have been given in fuller detail. It is on accurate regimental histories that tactical principles are founded, not on the necessarily abbreviated general histories, whether official or unofficial.

*The United Service*. February.—“China versus Japan,” by W. H. Shock, Chief Engineer, U.S.N. “Organisation of the Line of the Army,” by Captain Schenk, U.S. Artillery. “A Strange Wound,” a story of the Rebellion.” “Origin and Developments of Steam Navigation,” by the late G. H. Preble, Rear-Admiral U.S.N. A note on “The Real Japanese” is well worth reading.

## NOTICES OF BOOKS.

*Handbook of Tactics*. By Captain WALTER H. JAMES, *p.s.c.*, late R.E. Aldershot: Gale and Polden, 1895. Price, 4s.

Captain James’s preface gives the best idea of the contents of his book. “This book makes no pretension to be an elaborate treatise on tactics. It is merely intended to afford a ground-work to those who desire to pursue the subject further, by the study of the actual records of war.” This purpose it fulfils excellently, but we cannot help thinking it would have been improved had Captain James given his students some few indications as to how they should differentiate between cavalry, infantry, and artillery of different qualities.

This knowledge seems to us essential if any result is to be obtained from the study of military history, and nine-tenths of the confusion existing in modern tactical thought is directly traceable to the habit acquired of treating the ideas of cavalry, artillery, and infantry as definite positive quantities. A young infantry officer, reading, let us say, that at the battle of Waterloo the British infantry repulsed all attacks of the French cavalry on their squares, jumps to the conclusion that infantry will, under all circumstances, repulse cavalry attacks on similar formations; or it may be a young cavalry officer studying Seydlitz’s charges at Zorndorf, who comes to an exactly contrary conclusion.

The truth of course is, that between the different degrees of excellence that the general term in each case is supposed to cover, there may, and frequently does, exist a gap so wide that the untrained imagination is unable to cover it.

Every introductory handbook to tactics should, therefore, contain some indication of the point at which a number of men on horseback cease to be a rabble and become true cavalry, together with a reference to the degree of excellence to which experience shows that under proper training they may attain. Similarly, with infantry, the student should be told when they cease to be a mere agglomeration of men with muskets and become what the British infantry was under Wellington—a victory-compelling force that will take no denial.

Artillery is more difficult to deal with, for its values cannot be determined by the same simple factors alone, but involves the consideration both of precision of fire and mobility. Still, it would be well worth while making it clear to the student that precision of fire and excellence of material cannot compensate for deficiency of mobility, and indicating to him, if only in the briefest outline, how this mobility has to be striven after.

With all these points Captain James is well acquainted, and, whilst welcoming his book, we cannot but regret that he should have missed this opportunity of striking out a new line for himself, and opening to his readers a fresh and wider field of observation and speculation than the mere study of the three arms as constant quantities can ever afford.

*Tactical Notes and Solutions of Problems on Maps.* By Captain J. E. NIXON, D.A.A.G. for Instruction, India. Third Edition. Lahore: Civil and Military Press.

The author's preface states the purpose and indicates the spirit in which the work is written so clearly, that we feel we cannot do better than let him speak for himself:—

"These solutions of problems are published in the hope that they may be of use to those officers who intend to present themselves for examination for promotion, and either do not propose, or have not the opportunity, to attend a class of instruction, as well as to those who have to prepare themselves before joining a class.

"I would, however, beg the reader to remember that it is impossible for anyone to say that one solution of a particular problem, in reality as well as on paper, is absolutely correct, and that no other is admissible: it must remain, to a considerable extent, a matter of opinion; but at the same time it is possible to say that certain answers controvert recognised general principles and details, and therefore that they are inadmissible. Hence it follows that the object of these problems is to give a decent solution, but not the only correct solution possible.

"In real warfare the human factors of moral force, determination, and resource have most to say to the result of a fight, and these are quantities quite irreducible to paper; they have retrieved and will again retrieve the effect of false dispositions, but the chances will be in favour of the man who can correctly, or even fairly correctly, apply his knowledge of the general principles of his profession to what lies before him—in other words, who can solve the tactical problem set him on actual ground; and it is to enable any officer to gain these odds in his favour that problems on tactics, under given conditions applied to maps, are given.

"If the reader will set himself to discover defects in the dispositions given in the examples, and can satisfy himself of sound reasons for his belief, my aim will be obtained, as he will be obliged to call on his reasoning powers to support the changes his critical faculties advocate.

"The utmost time allotted to answering any question should not be more than thirty minutes; for it is not enough to answer a tactical problem only; it is most necessary to be able to give a reasonably good solution in a short time."

*Almanach für die K. U. K. Kriegs-Marine, 1895.*—Published with the permission of the Marine Section of the Imperial Ministry for War by the Hydrographical Department at the Imperial Dockyard at Pola, and under the supervision of the editor of the *Mittheilungen aus dem Gebiete des Seewesens*. Pola and Vienna: Gerold. Price, 4 marks.

The fifteenth edition of this valuable little work of reference has reached us, and excels even the high standard of excellence of its predecessors. The book has been slightly enlarged and the contents re-arranged. The first part contains the postal regulations and tariffs, with the telegraphic rates for all parts of the world, followed by the tables of weights and measures used in all countries, accompanied by a reduction of the metric system to English weights and measures, including the equivalent of *mètre-kilogrammes* and *mètre-tons* in English foot-pound and foot-tons, and *vice versa*, and this time there has been added a money-value table with the rate of exchange in Austrian coinage. Parts 2 and 3 are new, the first containing a complete list of the different steam and sailing vessel companies in Austria-Hungary, with tables of their ships, while the last gives a list of the Austro-Hungarian Yacht Squadron, with the different owners. Part 4 is also a valuable addition to the *Almanach*, consisting as it does of a concise and interesting treatise on the practical uses of electricity, with explanation of the ordinary terms and formulæ. The pay, pension, and other regulations in the navy, which used to be at the end of the work, come next in Part 5; and in Part 6 we find the usual complete gunnery tables, which have always formed an important feature of the book. Part 7 consists of the different war-fleets of the world, accompanied by details not to be found in any other work of reference; and 161 plans of the most important ships, eleven new ones having been added since last year, and others being slightly enlarged and corrected by later information, which has been obtained since they were first drawn. We may note another improvement in this part of the *Almanach*, which is that the plans of the most important and newest battle-ships are placed first in the list of ships of the various countries to which they belong. A list of the officers, both active and retired, concludes this useful little work; and we can heartily congratulate the editor on the excellence and care with which the book has been as usual compiled.

*Beiträge zur taktischen Ausbildung unserer Offiziere.* Von LITZMANN, Oberst-leutnant. II. Gefechtsübungen mit kriegsstarken Zügen, Kompagnien, und Bataillonen, zur Schulung der Unterführer für den Kampf im grösseren Rahmen. Leipzig: Georg Lang, 1895. Price, 3s.

The first part of Lieut-Colonel Litzmann's work, dealing with the training of troops in minor tactics, has decidedly made its mark in Germany. The *Militär Wochenblatt* prophesies even greater success for the second. It treats essentially of the practices necessary to bring the freedom of initiative, accorded by the German regulations to subordinate leaders, into harmony with the necessity that all these subordinates should so co-operate one with the other that the battle attack of brigades, divisions, and corps should be delivered with unity and cohesion. In other words, it emphasises the necessity for constant "playing together" of the several leaders under circumstances as closely resembling war as possible, in order to prevent the latitude allowed to junior officers developing into the wildest licence. Only through this constant practice can the repetition of such scenes of confusion as Hoenig, Meckel, and Scherff have so graphically described to us be prevented, and thus alone may the consequences Scherff fears in the future be guarded against.

*Kriegsgeschichtliche Einzelschriften. Herausgegeben vom Groszen Generalstabe. Abtheilung für Kriegsgeschichte. Heft 17. Truppen Fahrzeuge, Kolonnen und Trains, bei den Bewegungen der I. und II. Deutschen Armee bis zu den Schlachten westlich Metz. Berlin: Mittler, 1895.*

This work should prove invaluable to all who realise how much in war depends on the efficiency and organisation of the supply and transport services in rear of an army in the field. It is generally admitted that in the Franco-German War these services on the German side worked with a degree of certainty and a relative absence of friction never exceeded in any country in previous practice; but few realise how great were the difficulties to be overcome, and the demands that had to be made on the men and horses employed on these duties. Here we see it all laid down without partiality, favour, or affection, in black and white, and no one who reads between the lines can fail to gather useful information. Take each situation as it arises, and, with the imagination, reconstruct the scene—the roads blocked by accumulations of all kinds, the men dropping with fatigue, the horses exhausted with hunger and over-exertion—then eliminate all the misunderstandings due to insufficient practice, the delays due to untrained horses and drivers, the relative want of discipline compared to what obtains in the combatant troops; and note the enormous consequences in the way of increased rapidity of movement, and diminished anxiety on the part of the staff, that would flow from a fuller and more perfect organisation in time of peace. Substitute efficient traction engines in the heavy trains, leaving horses only to perform the work of actual distribution, and a further indication of the direction improvement should now take will be afforded. The difficulties in 1870 were great, but they will be twenty-five times greater in the next war, owing to the increase of numbers to be handled. The Germans have made great progress since then in everything relating to the mobility of their troops; but, great as the gain undoubtedly is, it may be questioned whether it is, in any degree, adequate for the increased work thrown upon them, and whether, indeed, any system based on the motive power of horses alone, and untrained agricultural horses in addition, can ever really solve the problem of mobility as it now presents itself. This book might well form the basis of a system of practical training for all officers connected with the transport service, and, indeed, for the staff also.

*Kriegsgeschichtliche Einzelschriften. Herausgegeben vom Groszen Generalstabe. Abtheilung für Kriegsgeschichte. Heft 18. Das Generalkommando des III. Armeekorps bei Spicheren und Vionville. Berlin: Mittler, 1895.*

This record of the activity of General von Alvensleben and his staff in the two engagements of Spicheren and Vionville forms a very important addition to the history of the 1870 campaign, especially so, since every use has been made of the latest French works on the subject—information which was almost entirely unavailable when the original Staff history of the campaign was first compiled. It appears to us, however, to suffer from the usual limitations of this class of work, *i.e.*, it does not and cannot lay the finger on the essential causes of the confusion and friction which arose in the execution of the General's designs. How great this confusion was, and how gross were the errors in execution, has been recently made abundantly clear by the works of Hoenig and von Scherff, to which attention has recently been called in these columns. It would be needless repetition to insist on them again; but read with these books in hand to serve as a guide in the formation of one's opinions, the work will be found invaluable.

As an indication of the care the student should exercise, the following will suffice:—Speaking of the attack of Wedell's (38th Brigade) from Mars-la-Tour, the book before us states that the attack was preceded by the effective fire of the two batteries belonging to the attacking force. Hoenig states, and Scherff, who at the moment was not one hundred yards away from him, corroborates his statement,

that the batteries trotted past the right flank of the brigade, and they heard the first shots delivered as they were crossing the Metz-Verdun Road; the next instant they were overwhelmed with fire, and the attack was fairly begun. That implies that the guns had not even ten minutes to effect their part, and seeing that, as far as we can ascertain, not half-a-dozen officers in the whole corps had been trained to "range" a battery, the amount of preparation they can reasonably be said to have effected must have been infinitesimal indeed. It is strange to find such a slip as this in an official work, for with each succeeding year it has been felt in Germany that the whole problem of the possibility of infantry attack turns essentially on this one point. Given equal armaments, and the incidents of the day prove that a capable staff can compel victory, even without the aid of artillery to prepare the way; but if the statement in this work is correct, then a successful attack can only be consequent on efficient artillery preparation, and infantry is degraded to the rank of a mere auxiliary to the artillery—a conclusion we should hardly care to see officially inculcated to our own infantry, though, of course, we are ready enough to admit that the best guarantee for success is to be found in their intelligent co-operation.

*History of the Commonwealth and Protectorate, 1649-1660.* By S. R. GARDINER, M.A. Vol. I. London: Longmans and Green, 1894; price, 21s.

It is with feelings of the most profound disappointment that we lay down this first volume of Mr. Gardiner's "History of the Commonwealth." No man in England has devoted more time and careful research to the subject with which he deals, and no one has established a greater reputation for accuracy and entire freedom from political bias of any kind; but, nevertheless, he has failed most conspicuously to delineate for us the true nature and the characteristics of the one man who essentially stamped his seal upon the evolution of his age.

Nowhere throughout his book do we find even an indication that he either appreciated or grasped the leading features of Cromwell's life or of his methods of viewing things, and the explanation is that he undertook to record and criticise purely military events without even an elementary knowledge of his subject, and with a strong preconceived prejudice against soldiers as soldiers—a prejudice apparently inherent in British civilians because they, alone amongst the nations, have never learnt by bitter experience the ultimate consequences of military ineptitude.

"It is never possible for men of the sword to rear the temple of recovered freedom"—this phrase occurring on the first page, forms the key note of the whole subsequent work; after that it seems scarcely worth while to attempt to argue with him further, for what is to be hoped from a man who, with all the evidence before him, deliberately assumes that the men who gave up all that they had and risked their lives in order to bring back into England some elementary conceptions of law and order, were mere butchers, inferior in every respect to the politicians who, sitting in safety themselves, sent out others to carry out their designs, and then hampered them by irresponsible interference? The real truth is that centuries of immunity from the miseries of foreign invasion and dominion have entirely destroyed the focus of our historians' eyes; to them the highest form of heroism consists in instigating other people to defy the existing law at their own personal risk, or in sending out expeditions to right the consequences of the politician's own incompetency by a lavish expenditure of the British soldiers' blood. Men trained in this school are simply incapable of estimating at their true value the resolution and strength of character displayed by even an ordinary leader in the field, let alone the feats of a man like Cromwell. Equally they fail to convey to their readers any adequate idea of the courage and endurance of the troops themselves. But history, without due recognition of these qualities and their general diffusion throughout the race, must always remain perfectly meaningless.

It was not because Cromwell and his men had worn the sword that they ultimately failed to "rear the temple of recovered freedom," but because, when the pressure of outside enemies was relaxed, the self-same spirit of religious faction that had initiated the whole disturbance reasserted itself; and, in the absence of any deeply-ingrained sentiment of loyalty to their self-elected head, the principle of hereditary monarchy reasserted itself, and turned the scale in favour of the old *regime*. So it has been in the past and so it always will be in the future, at least in all countries in which the loathing for official jobbery and corruption is as deeply ingrained as it is in the British nation; for hitherto, at any rate, no other adequate guarantee against these evils than the principle of hereditary monarchy has as yet been devised.

Those, however, who will read this book, applying their own trained military judgment to the accounts of the battles and marches the author gives us, will find a whole mine of information in his pages. Judging the battle of Dunbar as soldiers, they will find it in conception and execution a model for all time, not even surpassed by Rossbach in the completeness of the results obtained for the price paid. The march from Scotland to the south, if followed and checked by the compasses on the map, will be found a guide for even modern imitation; and in the wide sweeping turning movement preceding the final encounter at Worcester they will find the foreshadowing of the German leading at Metz and Sedan.

*The Story of the Civil War. A concise account of the War in the United States of America between 1861 and 1865.* By JOHN CODMAN ROPER. Part I.—To the Openings of the Campaign of 1862. G. B. Putnam's Sons, New York and London. 1894.

Mr. Roper is already known in England as the writer of an exceedingly interesting account of the campaign of Waterloo, and we have not the slightest doubt but that his new venture in military history will receive a hearty welcome. The American Civil War has been the subject of many monographs, but, up to the present, the student who would follow that extraordinary conflict as a whole, has been compelled to put up with the misleading compilations of violent partisans. Every single work of which we have knowledge, dealing with the war as a single event, is disfigured by bias and prejudice. Mr. Roper has undertaken to write an impartial history, and if his succeeding volumes maintain the same high level of accuracy as the first, this concise account should become the standard history of the war. His first chapter he devotes to the genesis of the quarrel, and we have nowhere seen the causes, for which the Northern and Southern peoples fought, so clearly stated or so tersely put. We have reason to believe that the impression is very general in England that the Northerners took up arms to abolish slavery, the Southerners to maintain it. The truth is that nothing was further from the thoughts of the Northern people, when the war began, than such a crusade. Lincoln, the great War President, distinctly stated, in his inaugural address, that he had no intention whatever of interfering with the domestic institutions of the individual States, and also that the Constitution gave neither him nor Congress the power to do so if they would. The Southerners could not, therefore, fight to maintain an institution which was not directly threatened. There can be no question, at the same time, that slavery was the primary cause of the secession of the Southern States. The Southern politicians, observing that the abolitionist party in the North was gradually emerging from insignificance, determined that their States should leave the Union before that party should become supreme. The South had other grievances, and the people readily approved the determination of their leaders. But in leaving the Union, the South believed that they were acting within their rights, and that the Federal Government had no legitimate claim on their allegiance if they chose to withdraw it.

The Federal Government, as the next step, made preparations to bring back the truant States to the Union by force of arms. The Southerners prepared to

resist invasion. It was not, then, to abolish slavery, but to maintain the Union, that the Northerners fought. It was not to maintain slavery, but in defence of what they believed to be their rights, that the Southerners withstood them. The people of the South had very little to do with the Act of Secession. That Act was the work of the politicians. But once secession was an accomplished fact the North had no more right to coerce the South, according to the Southern reading of the constitution, than had France or England. We think that Mr. Roper has done well to introduce his history with an explanation of the motives with which either party took up arms. It would be impossible for the student to realise the relative *moral* of the opposing armies if he knew nothing of the feelings by which they were actuated. A good cause, it is generally held, is a potent factor in war. In the War of Secession both sides were firmly convinced that their cause was good, and this in itself explains the enthusiasm and devotion which lasted untainted through four long years of conflict.

Mr. Roper, with the same lucidity of style and thought which characterised his book on Waterloo, discusses, in this volume, the principal military events of 1861, and touches the beginning of 1862. McClellan's plan for the invasion of Virginia is exhaustively treated and unhesitatingly condemned. "McClellan showed his lack of knowledge of the world in insisting, with such obstinacy, on his own scheme, when he ought to have known that the constant, cordial, and unfaltering support of the Administration must be a condition essential to his success, no matter what plan he might adopt. This support he wilfully forfeited at the outset, and he did so knowing perfectly well that he was doing so."

The friction between McClellan and the Federal Government renders his first campaign exceedingly instructive to English as well as to American soldiers. We are by no means certain that it has not more lessons for the English and the American peoples. Mr. Roper brings out with incisive clearness the disastrous effect of civilian interference with the conduct of the war and the evils which must of necessity accrue if military operations are controlled by a civilian minister. He shows us how President Davis, preferring his own strategy to that which his generals advised, deliberately threw away the best opportunity which fortune offered to the Confederacy. He shows us how Lincoln, in his selection of generals, chose men who held high position in the States, but were none the less absolutely incompetent for high command. He shows how the Northern Government hurried the generals into premature action and terrible disaster; and he gives us a picture of the Northern Secretary of War which fills us with pity for the unfortunate generals whom he controlled. "Utterly ignorant of military matters; despising from the bottom of his soul what is known as military science; making no secret of his general distrust of educated officers; rarely, if ever, lending an intelligent support to any general in the service; treating them all in the way in which the Committee of Public Safety treated the generals of the first French Republic; arrogant, impatient, irascible, Stanton was a terror and a marplot in the conduct of the war."

We are very pleased to find these strictures coming from an American pen. England, least of all nations, has the right to throw stones at the methods of the great Republic. Whatever may have been the faults of the Federal and the Confederate Governments, they were certainly no more than those of the English Government in our wars with France and Russia. Nor does the story of Khartoum give promise that the system under which we suffer will be less fatal in the time to come. It is little wonder that soldiers should look with envy on the system which wrought such remarkable results in the campaigns of 1866 and 1870.

Mr. Roper, re-echoing the universal opinion of the American officers who served throughout the war, has some weighty words on the standard of efficiency to be expected from troops of a few months' service. We regret that we have not space to quote these and other pertinent criticisms on the value of discipline and of formed habits of soldierly conduct. The book is accompanied by maps, which,



so far as we have had occasion to observe, are clear and full, and we may conclude with the hope that we shall soon have the pleasure of noticing the remaining volumes of what we are convinced will be a valuable addition to our military and political literature. We may add that many of the points which are emphasised by our author have been discussed by Lord Wolseley in the *North American Review* of 1889, and the conclusions of the Field-Marshal, who is more deeply read in the Civil War than any one outside the United States, may be profitably compared with those of Mr. Roper. We notice that the latter seems to overlook the fact that the unfounded apprehension of the Government for the safety of Washington—so potent a factor throughout the war—ruined McDowell at Bull Run as it did McClellan in the Peninsula, and he has scarcely exposed with sufficient emphasis McClellan's neglect to ensure the co-operation of the navy in his expedition to Fortress Monroe. It is very possible, however, that he has postponed criticism on these points to a future volume.

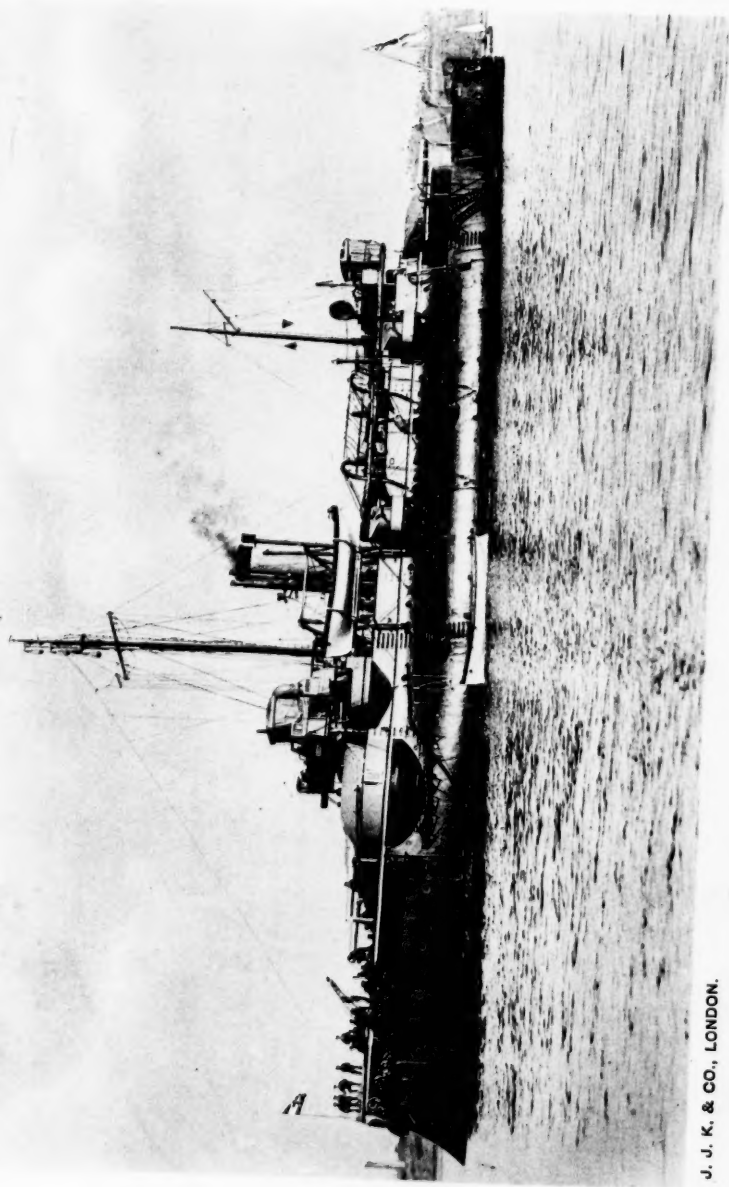
*Grands Artilleurs : Drouot, Senarmont, Éblé.* Par le Capitaine d'Artillerie GIROD DE L'AIN. Paris : Berger-Levrault et Cie, 1895. Price, 8fr.

The chapters of which this work consists appeared from time to time in the *Revue d'Artillerie*. They have now been collected in book form and amplified with notes and addenda. The work is strongly recommended by the French press, and, judging by the parts we have read of them in their original form, the recommendation is well deserved.

*Napoléon : Raconté par l'image d'après les Sculpteurs, les Graveurs et les Peintres.* Par Armand Dayot, Inspecteur des Beaux-Arts. Paris : Hachette, 1895. Price, 18s. 9d.

This is a magnificent *édition de luxe*—paper, type, and engravings all that can be reasonably desired. In it are united all the great paintings, busts, and an enormous number of engravings illustrating either the Emperor himself or incidents in his life. Certainly no Napoleonic library can be considered complete without it.





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For description see Naval Notes, page 298.

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**In consequence of the illness of  
Capt. Maude, the Editor, there  
are no Foreign Military Notes  
or Book Notices this month.**